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CARPENTER'S WORLD TRAVELS

Familiar Talks About Countries and Peoples

WITH THE AUTHOR ON THE SPOT AND THE READER IN HIS HOME, BASED ON THREE HUNDRED THOU-SAND MILES OF TRAVEL OVER THE GLOBE

"READING CARPENTER IS SEEING THE WORLD"



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IN AUSTRALIA

The "great white continent" in the midst of the teeming coloured races of the Orient, our Anglo-Saxon cousins are building a new empire of the Pacific.

CARPENTER'S WORLD TRAVELS

Australia, New Zealand and Some Islands of the South Seas

Australia, New Zealand, Thursday Island The Samoas, New Guinea, The Fijis, and the Tongas

BY
FRANK G. CARPENTER
LITT.D., F.R.G.S.





WITH 126 ILLUSTRATIONS FROM ORIGINAL PHOTOGRAPHS AND ONE MAP IN COLOUR

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While nearly all of the illustrations in CARPENTER'S WORLD TRAVELS are from my own negatives, those in this book have been supplemented by photographs from the official collections of the State and Commonwealth governments of Australia, the Dominion of New Zealand, and the United States Department of Commerce.

F. G. C.

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AUSTRALIA, NEW ZEALAND AND SOME ISLANDS OF THE SOUTH SEAS



AUSTRALIA, NEW ZEALAND AND SOME ISLANDS OF THE SOUTH SEAS

CHAPTER I

JUST A WORD BEFORE WE START

For to admire an' for to see, For to be'old this world so wide— It never done no good to me, But I can't drop it if I tried!

TARTING on a trip to Australia gives one for the moment the feeling expressed in Kipling's lines. The "Never-Never Land," as it is called, is so far away, the voyage is so long, and thoughts of the tobe-discovered continent are so full of dreary anticipation! The vast stretches of desert, the monotonous reaches of forests where the trees shed their bark and the silence is broken only by the harsh cry of the "laughing jackass," or kookooburra bird, the fearful dryness, and the awful heat—these things of which one reads so much in the books about the country do not make pleasant pictures in the mind of the traveller.

One can go to Australia in three weeks on a comfortable steamer from Seattle, San Francisco, or Vancouver; my own trip, however, was taken after a long, hot stay in the Philippines and a leisurely drifting from there past Borneo and down the coast of Cochin-China to Singapore and

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Java. At Batavia I caught a little tramp steamer bound for the East on a route passing through the Dutch East Indies to Torres Strait, Thursday Island, and New Guinea, and thence going southward inside the Great Barrier Reef to Brisbane in Queensland.

The itinerary looked interesting, the voyage venture-some, and as I walked on board my heart sang. A day or so later it wept. The meat was atrocious, the bread soggy, the rancid butter oil, and the water lukewarm and bitter. As a whole, my fellow voyagers were no better than the food. For the most part they were a motley crowd of dirty Hindoos and Malays, with the flotsam and jetsam, blacks, browns, and whites found scattered throughout the islands.

Moreover, two of our Moslem passengers developed a fever, which led to our being quarantined at some of the ports. We were twenty-five long days on the Equator, and it was only when the cool breezes off the Barrier Reef blew new ozone into our lungs that life again seemed worth the living.

But from the day I landed in Brisbane and started off on my journeyings in the "lonely continent" to the day on which I once more turned my face toward home I had no regrets that I had come. Australia was full of surprises and of interest for me; the beauties of New Zealand and the air of its mountains soon drove the evil out of my soul and put new life into my bones. I decided that here was a case where the desire "for to admire and for to see" that had sent me off to the other side of the world had done some good to me after all. I trust that you, too, may be glad that I went and that I have set down here the story of what I saw.



The few rivers of Australia are short and mostly unnavigable. In summer many of the streams dry up entirely or form a series of detached pools. The one big river system is the Murray, on the eastern side of the continent.



In some dense Australian wilds are towering tree ferns such as disappeared from the rest of the earth before the Coal Age and are now seen elsewhere only in the fossilized remains of prehistoric times.

CHAPTER II

THE GIANT OF THE SOUTH SEAS

HE Australians say their country is the biggest thing south of the Equator, and what I have seen here makes me think that they are right. Australia is as big as the United States without Alaska, twenty-five times larger than Great Britain and Ireland, fifteen times the size of France, and three fourths as large as all Europe.

It is a country of magnificent distances, being longer from east to west than the distance from New York to Salt Lake, and wider from north to south than from New York to Chicago. By the fastest trains, Brisbane is thirty-six hours from Sydney, and Sydney is eighteen hours from Melbourne. It takes three days and eighteen hours to make the trip by rail from Melbourne on the southeast to Perth on the southwest coast.

Australia is also a land great in its resources. Since gold was discovered there in 1851, it has produced five billion dollars' worth of the precious metal. Gold has been found all over the continent—in the mountains, on the farms, and in the sands of the deserts. Yet the greater part of the country has never been prospected, vast areas have not even been explored, and new gold mines may be discovered any day. It is known that the continent contains great quantities of iron, and tin has been extensively mined. There is coal in every state and the deposits of

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New South Wales, the only ones that have been well surveyed, are estimated to contain more than one billion tons. The coal beds of the state of Queensland are believed to be inexhaustible. Silver, too, is found in all the states, and the Broken Hill mines of New South Wales are among the richest of the world.

More important than its mineral wealth, however, are the pastoral and agricultural riches of Australia. Enormous flocks of sheep pasture on the sweet grasses of thousands upon thousands of her acres. She produces some of the best wool on earth and exports a quarter of a billion dollars' worth annually. Her wheat lands produce enough for the needs of her five and a half million people and furnish one hundred million bushels for export. It is estimated that with close settlement she can raise one billion bushels, or sufficient to feed a population of one hundred and fifty millions. Dairying is now one of the largest of her industries and sixty million dollars' worth of Australian butter goes overseas every year.

In Australia there are great fertile tracts of land, but there are also vast areas of desert. The well-watered eastern part of the continent is rolling and hilly for about one hundred and fifty miles back from the coast. West of this region lies the country of plains, the first part of which is a belt of prairie lands three hundred miles wide, where there are fine sheep and cattle ranches and wheat and fruit farms. Here, too, is the only real river system of Australia, the Murray–Darling. Near the western border of the plains is the salt Lake Eyre sunk in a depression below sea level. Beyond Lake Eyre, extending almost across the continent to within three hundred miles of the west coast, and to within about the same distance from the

THE GIANT OF THE SOUTH SEAS

ocean on the north and south, is the Great Desert. This has an estimated area of eight hundred thousand square miles, or about one fourth of all Australia. Except in the southwest corner, where gold is mined, there are said to be less than one thousand white people in this arid waste. The air is so dry that one's fingernails become as brittle as glass, screws come out of boxes, and lead drops out of pencils. I am told there are six-year-old children living in this region who have never seen a drop of rain.

Australia is a land of strange things as well as big onesqueer plants, queer animals, and aborigines who are the most backward members of the human race. There are lilies that reach the height of a three-story house, trees that grow grass, and other trees whose trunks bulge out like bottles. In the dense "bush" are mighty eucalyptus trees rising two hundred feet high. They shed their bark instead of their foliage, and the leaves are attached to the stems obliquely instead of horizontally. There are towering tree ferns such as disappeared from the rest of the earth before the Coal Age and are now seen elsewhere only in the fossilized remains of prehistoric times.

Two thirds of the animals of Australia, like its famous kangaroo, are marsupials; that is, the females have pouches in which they carry their young. Except for the opossum, and the opossum rat of Patagonia, marsupials occur nowhere else. Stranger than the kangaroo, stranger even than Australia's wingless bird, the emu, is the platypus, which is found only on this island continent. It has a bill like a duck's, fur like a seal's, and a pouch like that of a kangaroo. It is equally at home on the land and in the water. It lays eggs, yet it is a mammal; though a

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mammal it has no teats, but nourishes its young by means of milk that exudes through pores into its pouch.

As for the natives, when William Dampier, the first Englishman to land on the shores of Australia, came here in 1699, he described the aborigines as "the miserablest people in the world, with the unpleasantest looks and the worst features of any people I ever saw. Setting aside their human shape, they differ little from brutes." Whence these natives came and how long they had been on their island continent none knows. All agree, however, that the bushman, or blackfellow, as he is generally called, is the lowest form of man. Throughout uncounted years he has made no progress. He is without history and without tradition. Contact with civilization kills him. The aborigines of Australia are a dying race, numbering now a scant fifty thousand.

For centuries after the rest of the world was making history, Terra Australis, or the South Land as it was called, was also a *terra incognita*, a land unknown. This does not seem strange when one considers how isolated it is. It is so far from the other land masses of the globe that it deserves its name of the "lonely continent." It is eighteen hundred miles from Asia, forty-five hundred miles from Africa, and more than six thousand miles from the west coast of North America. Even New Zealand, which on the map looks so close to it, is twelve hundred miles away. It takes the best Pacific steamers nineteen days to go from Sydney to San Francisco, and for the fastest mail boats it is a five-weeks' voyage from any Australian port to Liverpool.

When the United States was an infant among the independent nations of the earth, the history of Australia be-



Australia produces enough wheat for her 5,250,000 people, and has 100,000,000 bushels for export. With close settlement, it is estimated that she can raise 1,000,000,000 bushels, or sufficient for 150,000,000 people.



Half the world is kept warm with wool from the flocks of sheep pastured on tens of thousands of Australia's acres. She produces some of the best wool on earth, and exports more than any other country.



Fifty years ago Brisbane was a village, and before that a British convict colony. To-day it is the fourth city in size in the Commonwealth, and the capital of the progressive state of Queensland.



Brisbane is cut in two by the Brisbane River, a wide stream navigated by ocean vessels, which come here for cargoes of frozen beef, wool, and grain.

THE GIANT OF THE SOUTH SEAS

gan. And just here the story of the "lonely continent" is linked with our own. There were a number of persons in the American colonies who remained loyal to the King throughout the Revolutionary War. When independence was won they found this country an uncomfortable place in which to stay. So it was planned by the British to make Australia a new home for the American "Loyalists." This scheme failed, but another took its place. In colonial days the British had used America as a dumping place for undesirable citizens, especially political prisoners, and had sent them across the Atlantic at the rate of one thousand a year. Now that this human riffraff could no longer be shipped to us it was decided to transport them to Australia. Accordingly, in 1788 a thousand convicts were landed at Sydney Cove, and this was the beginning of the British occupation of the great South Land.

One hundred and thirteen years after that initial settlement there came into being the Commonwealth of Australia. In the birth year of the present century, the half dozen different Australian colonies, some as widely separated as any parts of our own country, became a federated union of the six states of Queensland, Victoria, New South Wales, South Australia, West Australia, and Tasmania. Before this these states had quarrelled frequently over matters of trade and internal development, and each had gone its way without regard for its neighbours. With federation, the tariff barriers between them were removed, common policies were agreed upon, and all joined hands in the determination to work together to create a new nation of white men within the British Empire.

Besides the six states, there are the Northern Territory, the Federal Territory, and the territories of Papua and

AUSTRALIA, NEW ZEALAND, SOUTH SEAS

New Guinea. The Northern Territory is the tropical area of some half a million square miles ceded by the state of South Australia to the central government. The Federal Territory corresponds nearly to our District of Columbia; for it is the nine hundred and forty square miles set aside for Canberra, the new capital of the Commonwealth. During the erection of the necessary buildings at Canberra, the capital remains at Melbourne. The territory of Papua, or British New Guinea, is the southeastern part of the island of New Guinea and is administered by officials nominated by the Governor-General of Australia. The Territory of New Guinea consists of those lands formerly embraced in German New Guinea, which Australia governs under a mandate from the League of Nations.

In many ways the constitution of the Commonwealth is like ours. Each of the states has its separate government, with great latitude in the management of its own affairs. The British Crown appoints a Governor-General for the whole Commonwealth, but his authority is merely nominal and the real executive power is in the hands of the Premier of Australia and his nine ministers. The Prime Minister is the leader of the majority of the Federal Parliament of which he and his cabinet must be members.

Parliament consists of a Senate and a House, organized much like our own Congress. The Senators are elected for six years and the representatives for three, but under certain conditions the House may be dissolved by the Governor-General before the three-year term is up. There are seventy-six representatives elected in proportion to population, and thirty-six senators, six from each state. Senators and representatives get the same salaries, each receiving five thousand dollars a year. It is provided that

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no member of Parliament can hold office if he has been bankrupt and failed to pay his debts, and if he takes benefit, whether by assignment or otherwise, of any bankruptcy law during his term of office his seat will at once become vacant. He cannot have any interest in any company trading with the government, nor can he take pay for other services rendered to the government. The state governments are organized like that of the Commonwealth, each having its premier, who is the leader of the majority in the state Parliament.

Following the World War many countries experienced political upheavals and radical ventures in government. But it was in Australia years earlier that a working-man's party first gained control of a national government. As we go about in the several states of the Commonwealth we shall find many evidences of the part played in public affairs by the labour unions. They have frequently held a majority in state legislatures, but are especially anxious to dominate the federal Parliament so that they may put their ideas into effect on a wholesale scale. Woman suffrage, adopted in Australia almost without opposition, has added strength to the labour element, for it is generally agreed that nearly every workingman's wife goes to the polls, while many of the women of the well-to-do classes stay at home.

CHAPTER III

QUEENSLAND

OST travellers from our hemisphere first set foot on the Australian continent at Sydney, the biggest seaport of the country and the seventh city in size in the whole British Empire. I first stepped out upon its mainland at Brisbane, which lies five hundred miles north of Sydney and is the capital of the state of Queensland.

In coming down the coast from Thursday Island and Torres Strait I had one of the wonder trips of the world, for my way lay inside the Great Barrier Reef.

Imagine a chain of coral as long as from New Orleans to Chicago. Let the chain be composed now of atolls, great coral walls encircling lagoons, now of long coral ridges, and now of gardens of the beautiful red, white, and pink flowers fashioned by these insects of the seas. Such is the Great Barrier Reef, which extends along the whole eastern coast of Australia northward to Torres Strait. For the most part it is only from five to fifteen miles from the mainland although in one place it is a hundred miles off shore. At times we were close to the coast, and again were moving along near huge rings of coral that seemed to float on the green sea. Some of the atolls had vegetation upon them, their round basins being circled with coconut trees, while others, seen only at low tide, were stony and bare.

QUEENSLAND

The air was wonderfully clear and the sky a heavenly blue. The few clouds made big patches of dark blue velvet on the dreary gray of the Australian mountains. The sea was as smooth as a mill pond. We were feeling our way along through a wide canal, one side of which was walled with the cliffs of Australia and the other by this masonry of countless millions of coral polyps. Our steamer had to go cautiously, for under the smooth waters were treacherous spurs and peaks of coral ready to rip holes in her side. Our captain kept a sharp lookout for brown waters, which mean bars, or green, which indicate coral, and steered a course through the deep blue of the safe passage. Among navigators the shallows between Cape York and New Guinea have the reputation of being the worst waters in the world. Some of the ship captains boast that they can smell the coral in the dark, just as those of our transatlantic liners declare that they can smell the ice of the bergs that drift down from the North.

Such cautious sailing began to get on the nerves of some of the passengers and I think all of us were glad when our steamer turned into Moreton Bay, the outer harbour of Brisbane. We approached a low shore of sandy dunes and beaches rising gradually into rolling hills thick with trees. Slowly we entered the mouth of the wide Brisbane River, up which we travelled for several hours. As our steamer went on through the murky water, we could look over the side and see masses of jelly fish, transparent mushrooms of bright violet, tossed this way and that by the waves from the ship. The banks were low and covered with bushes. Along the way there were meat-freezing plants, each surrounded by little houses roofed with galvanized iron, the homes of the workmen.

As we kept on, the country on each side of the river became more hilly, and when we reached Brisbane I found it a place of as many gulleys as Kansas City. Most of the town lies on the right bank of the river. There are many pretty villas, and rising high above them is the Queensland Parliament House.

After a lenient examination by the customs officials, I drove to my hotel through streets not unlike those of an American town. They were paved with wood instead of brick or asphalt. The stores reminded me of ours at home, and the size of the buildings surprised me.

Brisbane, the capital of the second largest of the six states of Australia, has more than two hundred thousand people, and is the fourth city in size on the continent. During the last half century it has had a phenomenal growth. Less than seventy-five years ago it was taken away from the neighbouring colony of New South Wales and became the capital of Queensland. At first it grew but slowly, for it was handicapped by having been the site of the Moreton Bay Settlement, a colony for the worst of the convicts sent over from England. When it began to get on its feet a terrible flood swept away so many of the houses in the low-lying sections that it was believed the town would never recover. Yet it took a new lease of life, and to-day it is hard to realize that, fifty years ago, it was only a village with less than one thousand inhabitants.

The public buildings were planned with an eye to the needs of the future. The State Treasury would do credit to our own capital at Washington. The Law Courts cost nearly two hundred thousand dollars, and the Parliament Building half a million. In George Street is a splendid palace which houses the Lands Office, and the Public

QUEENSLAND

Library is a striking piece of Italian architecture. On a steep cliff above the big-domed custom house rises the Cathedral of St. John, considered the finest Gothic structure in all Australasia.

Talking with the Oueenslanders it is easy to see that they think theirs is the coming state of Australia. They say the good lands of Victoria have long since been taken up, that New South Wales is fairly well developed, and that such large areas of South Australia and West Australia are desert that those states can never support a great population. Queensland has two slogans: One claims that it is "a paradise for willing workers," and the other that it is "the richest unpeopled country in the world." The state has vast tracts of arid land, which it expects to reclaim by artesian wells. It has already redeemed from the desert a country more than twice as large as the state of New York, having discovered that most of the great area beyond the coastal range is underlaid with subterranean lakes and streams, which will furnish water for stock. The cultivated acreage is growing every year. Enough pastures for seventeen million sheep are now in use, and the state has already nearly twice as many sheep as any other division of Australia.

Queensland might be called "The Newest England" of these British south lands. It is a principality in itself. It comprises the northeastern quarter of the Australian continent; from north to south it is as long as from Washington to Omaha, and from east to west about as wide as from Washington to Chicago. It is three times as big as France, and twelve times the size of England and Wales.

The upper half of Queensland is not far from the Equa-

tor and raises cotton, sugar, tobacco, and all sorts of tropical fruits. Bananas do so well that one of its nicknames is the "Banana State." Scrub lands cleared at a cost of about ten dollars an acre can be planted without ploughing and will produce fruit in a twelvemonth. Fifteen tons of pineapples to the acre is not an unusual crop, and pines weighing from fourteen to sixteen pounds have been grown. The factories for canning this fruit that have been started with the aid of the government may some day compete with the great pineapple canneries of Hawaii.

A great advantage of the fruit-growing business in Australia, as in South America, is the difference in seasons in the Northern and Southern hemispheres. Being south of the Equator, the fruits ripen at a time of year when European and North American markets offer the best prices, and refrigeration and fast boats are already landing Queensland fruits on our winter tables.

Australia usually raises enough sugar to supply her own needs, and ninety per cent. of her crop is produced in tropical Queensland. Sugar cane was first grown here about 1865, and in the early days the plantations were worked with coloured labour brought in from the South Sea islands. Later on it was decided to send the "blacks" home, and keep the resources of the state for white men exclusively. From the standpoint of the growers, this was a real sacrifice, and the Commonwealth government is now doing everything possible to stimulate sugar production. At one time it paid bonuses on sugar produced by white men, but these have been given up. Now the government buys the entire crop outright and controls its refining and sale. The cane is crushed in Queensland, but is refined by the big Colonial Sugar Refining Company in Melbourne



Australia has her sugar bowl in Queensland, which produces nearly enough cane to supply the entire population. It is one of the few places in the world where the crop is grown without coloured labour.



When it is snowing in New York, the Queensland fruit grower is gathering his pineapples. They are raised on land leased from the government with the privilege of purchase on easy terms.



On the elevated sandstone plains of interior Queensland grows the queer bottle tree. One's general impression of Australian forests is their total unlikeness to anything elsewhere.

QUEENSLAND

and Sydney. Under the government monopoly the consumer pays about twelve cents a pound. Importation of sugar by private individuals or companies is forbidden, and whenever the Queensland crop falls below three hundred thousand tons the government imports enough to meet the requirements.

In the southern part of the state are the Darling Downs, four million acres of the richest soil on the continent Here the average rainfall is more than thirty inches a year, and almost everywhere artesian water may be had within a few feet of the surface. Since they were first settled in 1840 the Downs have been the home of prosperity. Today they roll away in orchards and green fields, dotted here and there with herds of fat dairy cattle, and checkered with chocolate squares of ploughed lands. I am told that some of the soil is too rich to raise wheat until it has been farmed a few years. In some places it produces one hundred and ten bushels of corn to the acre, and on a number of farms two crops are raised every year. A great deal of money is made in alfalfa, which grows very rank. Often as many as nine crops are cut in one year, each yielding from one to two tons per acre. On the best land it is not uncommon for a man to get a hundred dollars per acre annually out of alfalfa. As a general thing the farming is carelessly done, and but little fertilizer is used. The seeds are merely sown and the crop is reaped.

The principal city on the Downs is Toowoomba, two hundred miles west of Brisbane and two thousand feet above sea level. It serves as a playground and health resort for the people of Brisbane and elsewhere in the hot lowlands. Throughout the year the climate is temperate and bracing, and in June and July, the coolest months of the year, there

are often frosty mornings here and fires are welcome at night.

Toowoomba is also the unofficial capital of the rich farming district of the Downs. Its streets are generally full of men who have ridden in from the country to talk sheep, wool, grapes, wheat, or timber, or to seek amusement after their hard work in the fields. Its pretty homes are surrounded by gardens of English flowers and hawthorne hedges and rows of weeping willow trees. I have seen many weeping willows along the streams of Australia, and the people say that all are the descendants of slips brought from the island of St. Helena. In the old days ships bound for Australia used to stop for water at the place of Napoleon's exile and the outgoing colonists provided themselves with willow cuttings to be planted in their new homes.

Queensland's great need is more people. In this huge state, capable of supporting a population of many millions, there are less than eight hundred thousand, or only about one person to every square mile. I have before me an advertisement of the Acting-Registrar General declaring that the two necessities of the state are "increased production and increased population" and offering inducements in the way of cheap lands on easy terms to "the industrious in every walk of life."

Throughout Australia land transfers are made under what is called the Torrens Title, a system which has spread to Canada, to England, and to other countries of Europe, and has been adopted by the United States for the Philippines and Hawaii. Ohio also has adopted it, and others of our states are using it in modified forms. By this system the landowner registers his property with the

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land office, receiving a duplicate certificate of title. If later he wishes to sell he hands over the certificate to the purchaser, who has the sale registered at the land office, where the facts of the transaction are entered on the original certificate. If the owner puts a mortgage on the property the terms are recorded with the Registrar. The certificate therefore always contains the name of the owner, a description of the land, and a statement of all liens and encumbrances. No title searching is necessary, and by the payment of a small fee at the Registrar's office, anybody can find out all about a given piece of land. The Torrens System and the secret ballot are two big ideas that we owe to our Australian cousins.

For many years a thorn in the flesh of the small farmers and workingmen of Queensland was the fact that, by special legislation, big lease holders of the public lands paid lower rents per acre than the holders of small tracts. The Land Act Bill of 1915, framed to remedy this condition, was passed by the lower house of the state Parliament but was rejected by the upper chamber, or Legislative Council. The Council was at that time composed of thirty-seven members appointed nominally by the Crown, but really by the Queensland Prime Minister and his Cabinet. They could hold office for life, and no limit was placed on their number. As constituted in 1915, the Council had only two representatives of labour and the rest of its members were conservatives, many of them moneyed men determined to guard their own interests. On the other hand, the seventy-two members of the Legislative Assembly are elected by the people for three-year terms. The Land Act Bill was passed by the next Assembly and again rejected by the Council. Then the

government stepped in to see that the will of the people was carried out. It appointed enough new members known to favour the act to swamp the conservatives in the Council, and the bill at once became law. So enlarged, the Council, with its majority in absolute accord with that in the lower house, became a mere rubber stamp for the legislation passed by the Assembly, and even approved the bill ending its own existence.

The government of Queensland is sometimes criticized as a patriarchal institution for coddling the people. Both town and country make all sorts of demands on it to serve their interests. They tell a story of one official who, exasperated by a deputation of farmers, burst out with this:

"You ask the government to do everything. I am surprised that you do not demand that we furnish milk for your babies."



Queensland, the northern half of which lies just south of the Equator, is sometimes called the "Banana State," because of the success of settlers in growing that fruit in the newly cleared lands.



The farmer who owned the hill now known as Mount Morgan sold it to prospectors for five dollars an acre. It has since yielded gold worth \$125,000,000 besides vast quantities of copper.



In the Anakie gold fields of western Queensland mining sapphires is a well established industry, with an output worth about one hundred thousand dollars a year. The lemon or orange tinted stones are the most prized.

CHAPTER IV

A CROWN OF GOLD AND A CROSS OF CACTUS

UEENSLAND is one of the gold states of Australia. It is especially noted for Mount Morgan, perhaps the richest gold mine of the world. This mountain is twenty-four miles from the city of Rockhampton, on the coast north of Brisbane. It has already produced more than one hundred and twenty-five million dollars' worth of gold, and paid more than fifty million dollars in dividends. The original fourteen owners invested only a few hundred pounds.

The mountain belongs to a low range of hills not far from the coast. It was part of a farm owned by a man named Gordon, who had fenced it in and was using it for pasturage. One night Gordon was visited by two brothers named Morgan, who were prospecting. The Morgans stayed overnight, and Gordon told them he thought there was copper on his farm as he had noticed green and blue stains in the rocks. The next day he took the prospectors to the mountain, and when they left they carried away samples. A few days later they came back and offered him five dollars an acre for the property. He was glad to sell, and for this price the Morgans bought one of the richest mining properties ever known. To get money to work the mine they sold a half interest to three men in Rockhampton for ten thousand dollars. With this they

experimented, and finally discovered that the ore could be worked by the chlorination process. The result was that they and their associates soon became millionaires.

Since then the works have expanded until a town has grown up at the foot of the mountain. There are great mills, in which more than two thousand men are employed. The mine has continued to pay big dividends, but these now come from copper rather than from gold. For, when the gold began to grow scarce, apparently inexhaustible supplies of copper were found underneath the deposits of the more precious metal.

Some people think that there may be other gold deposits in the neighbourhood equally as rich as those of Mount Morgan. However that may be, it is a fact that twenty miles from the city a little boy one day found a nugget worth ten thousand dollars.

Rockhampton is a city of twenty thousand founded on the gold and copper mines. It is now growing as a centre of the dairying and mixed farming interests fast developing in the surrounding country. The town, which has the Tropic of Capricorn running through one of its streets, is built some thirty miles inland on a steamy valley of the Fitzroy River. It is cut off by a high range of hills from the ocean breezes. Even in June, the coolest month of the year, the thermometer goes above eighty degrees Fahrenheit, and in February the mercury often rises to one hundred and sixteen. In the early gold-mining days the Britishers who came out to get rich and toiled in the heat nicknamed the place the "City of the Three S's"—Sin, Sweat, and Sorrow. Nevertheless, it is a growing town full of business.

Three hundred miles northwest of Rockhampton is the

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town of Charters Towers, the centre of another big gold field a few miles back of the seaport of Townsville. The gold at the "Towers" was discovered in 1872 by three prospectors, who took out millions of dollars' worth in a short time. The principal mining is quartz, some of the workings being very deep. As at Mount Morgan, copper mining is carried on profitably along with the gold mining. Another field is that of Gympie, where, it is said, the boys used to pick up grains of gold in the streets after a rain, sometimes getting as much as half an ounce a day. In that town one man found a nugget worth eleven hundred dollars.

So far, Queensland has produced nearly half a billion dollars' worth of gold, and mines are still being worked throughout a large area, although the cream of the known deposits has been skimmed off.

There are also deposits of lead, as well as of iron, bismuth, and silver. Iron is found in all sections, and in one district there are little mountains of iron ore. Mt. Leviathan, a hill two hundred feet high, is said to be composed of pure magnetic iron. In the long tongue of York Peninsula, which Queensland thrusts up toward Torres Strait, there are tin deposits over a wide area. Tin is found also in the southern part of the state.

Some of the finest Australian opals come from western Queensland. That region has a long belt of opal-bearing country, extending from a point near the Gulf of Carpentaria across the southern border of the state and into New South Wales. The opals are brought into Brisbane by the handful and sold at low prices. Many of the opal miners are sheep-shearers, who hunt for the stones in the off season. The gems are found in quartz and in

sandstone, from six inches to thirty feet below the surface. The Queensland black opal brings big prices in Paris, London, and New York. It is not really black but a mixture of rich colours, with iridescent green and violet prevailing. Deep down in its heart is a living spark of flame, which has given it also the name of the "fire opal."

About two hundred miles west of Rockhampton are the Anakie gem fields which are studded with sapphires. Stones to the value of nearly one hundred thousand dollars are produced there every year. The best of them are of the clear lemon and orange tints which have become

especially popular with the jewellers of Paris.

So much for Queensland's crown of gold studded with gems. Her cross is the greenish-gray cactus, which has ruined vast areas of rich agricultural lands. I have heard different stories about how prickly pear came to Australia. Some say John Macarthur, who was such a benefactor to the country through his introduction of the Merino sheep from Spain, is responsible for it. Perhaps he had seen the cactus hedges used in the thickly settled Mediterranean countries to separate small holdings and thought they would be a good thing for the gardens and paddocks of the Australian settlers. It is even said that the first prickly-pear plant was sent to the Downs carefully wrapped in cotton wool and packed in a sealed box. Now, for mile upon mile the traveller sees only an impenetrable thicket of this spiny, gray-green vegetation, growing right up to the settlers' front doors. It is stated that the plant covers more than fifteen million acres of Queensland, or an area nearly twice that of Rhode Island.

The state government sent a Prickly-Pear Commission on an eighteen-months' tour around the world in the



When an Australian speaks of clearing the land of "scrub" he does not refer to a mere matter of brush and saplings, but to what we would consider a dense forest of full-grown trees.



In the cattle country of southern Queensland the farm houses are onestory frame bungalows, roofed with corrugated iron and often set up on iron piles to keep out the wood-devouring ants.



An American dropped from an airplane into Martin Place, Sydney, would feel very much at home. Many of the newer buildings are of our skyscraper type, while the street is filled with motor cars made in the States.

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effort to find some parasite or disease with which to destroy the pear. It has offered great rewards to any chemist who finds a specific against it, and year by year different methods of extermination are tried out. So far, however, no cheap and infallible way has been found. Uprooting or cutting is useless, unless every single leaf is burned. Squirting a solution of arsenic and soda into each leaf by means of a "pear gun" has proved effective in the case of small growing plants, but this is too slow and expensive on such an overwhelming proposition as fifteen million acres. The remedy probably lies in the closer settlement of the country and the principle of every man's keeping his own dooryard clean.

CHAPTER V

THE METROPOLIS OF THE ANTIPODES

'AM in Sydney, the fastest-growing city of Australia and the commercial metropolis of this part of the world. People who look upon the island continent as a big desert surrounded by a strip of pasture should come to Sydney. They will find here a city that will open their eyes. It has now about the population of St. Louis or Boston, but it seems to have twice as much business as any place of the same size in the United States. Situated south of the Equator and about the same distance from it as Louisiana, it lies in the centre of the most populous part of Australia, and just where goods can most easily come in for distribution over a vast territory. Sydney is the capital and distribution point for the two million people of New South Wales, a state the size of Texas and Indiana combined. These two million are the richest people of a country with a per-capita wealth of \$1,624 or, at five to the family, eighty-one hundred dollars per family.

I know one man who has a million acres of land, and I could hardly throw a stone in the business part of Sydney without striking the holder of five thousand acres and more. There are men here who have a million sheep, and many who own flocks of tens of thousands. Australia has no Fords or Rockefellers. Rarely does any one leave an estate worth above five million dollars. On the other

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hand, the wealth is more evenly divided than in the United States, and the workers live much more comfortably than their brothers in Europe. Everywhere on the streets of Sydney I see signs of well-being. There are no patched clothes, and in fact there is no poverty as we know it.

Of all the big cities south of the Equator, I like Sydney best. Especially do I like the people here. Buenos Aires has a population of more than a million and a half, but it is a succotash of Italian, Portuguese, and Spanish ingredients, with a mixture of Indian, English, German, and French. Rio de Janeiro has a million and a quarter inhabitants, sprinkled with so much African blood that one can hardly tell where the white ends and the black begins. Moreover, as in other cities of South America, most of the people are wretchedly poor.

Here the faces are all English, Irish, and Scotch, or, what is better, pure Australian. The Australians are finer looking than their British cousins. They are taller, straighter, and better-formed. Six feet is not an uncommon height for either men or women. The latter are Amazons. Many of them are slender and they tower above me like so many giantesses. They are sometimes called "cornstalks," because they spring up so rapidly and grow so tall.

Its magnificent harbour and the enterprise of its people have made Sydney the New York of Australia. The city does business with all the world. It is the terminus of a dozen great steamship lines connecting the continent with Europe, Asia, Africa, and North and South America. To-day there are tramps in the harbour from Cape Town, ships from China and Japan, fast vessels from France,

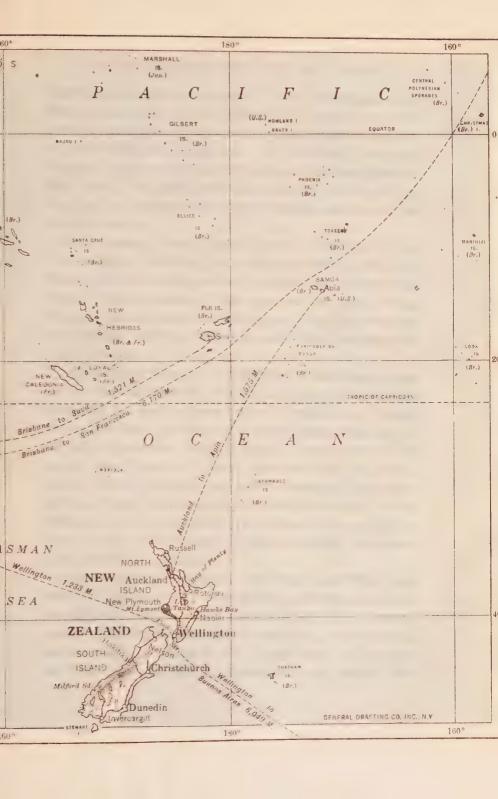
and big steamers from England. One American passenger line connects Sydney with San Francisco, and three others carry freight to and from our Pacific and Atlantic coasts. The Commonwealth Line, which now operates a number of Australian government-owned ships of steel and wood, has a regular service from Sydney to London via the Suez Canal. Besides being linked up with all the great ports of the world, Sydney is a centre of trade along the coast and with the countless islands of the South Seas.

The commerce here is enormous. The wool shipments alone have a value of something like sixty million dollars a year, and there is a large export of grain, coal, and meat. Considering the number of the population, the imports are very heavy. Although New South Wales has not so many people as Chicago, it buys three hundred and sixty million dollars' worth of goods from foreign countries every year, and most of them come in through Sydney.

In beauty and commercial advantages, Sydney harbour equals the Bay of Naples, the harbour of Rio de Janeiro, or the famous waters about Constantinople on the Bosporus. At its entrance, which is not more than a mile wide, great rocks rising to more than half the height of the Washington Monument form a natural gateway. No matter how stormy the ocean outside, when a steamer passes the Heads, it finds quiet waters. It enters a winding lake or stream, with hundreds of bays, inlets, and creeks studded with islands and walled with wooded hills. The harbour has an area of twenty-two square miles of water held in a rock-bottomed basin. There is a reef in the fairway, but since it runs parallel with the direction of









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incoming and outgoing vessels, it is an advantage rather than a drawback, for it divides the harbour into two deep-sea channels. There are no large rivers depositing sand and silt to be dredged out. At the Heads the water is eighty feet deep, and at the wharves it is from thirty to fifty feet. The ships come right into the town, so that one can step ashore, walk three minutes, and be in the business section.

Since coming here I have climbed to the top of the Public Works Building for a bird's-eye view of the city. This building is on the harbour in almost the centre of the town. Standing upon it one can see the great ocean steamers landing goods at the quays, the ships entering and leaving, and the little tugs and ferries moving this way and that.

Looking over the city I noticed that its buildings cut the skyline like the teeth of a broken saw, one now and then extending for many stories above its neighbours. There are indeed three Sydneys—the fast-disappearing city of the early governors, with its gabled cottages and brick houses; the Sydney of a later time with the ugly architecture of the Victorian era; and the modern, up-to-date Sydney, which reminds me of an American city. It has buildings of the skyscraper type, though not so high as ours. Many of the houses are built of yellow sandstone taken from local quarries.

Sydney covers a large area. Its streets wind about like those of Boston, and it is facetiously said that the place was originally laid out by a bullock driver with a boomerang. The city is noted for its excellent wooden pavements, which, according to our consul here, will last for ten years without repairs. Some time ago part of the

pavement of George Street, upon which are some of the chief business houses, was taken up. The blocks were as good as when laid eleven years before, save that they had been worn down about one fourth of an inch. These blocks are of eucalyptus wood dipped in boiling tar and laid on a foundation of cement. They are fitted as closely as a parquet floor, and are so smooth that three-ton loads can be hauled over them by one horse. Paving blocks of the Australian eucalyptus are now used by some cities of Europe.

One of the most interesting rides I have had in Australia was my trip from Brisbane to Sydney. This takes one through the better parts of the states of Queensland and New South Wales. The road-bed is smooth and the cars are about like those of the United States except that there are no Pullmans until the boundary of New South Wales is reached. There is no baggage checking system such as ours, although the traveller is given a receipt for his trunks. The first-class car in which I rode was divided into compartments with cushioned benches under the windows.

The scenery on this trip is worth noticing. A part of the way is over mountains and across rolling grazing lands. Some of the ride was through forests of eucalyptus trees, always and in all their numerous varieties called "gums" by the Australians. The leaves of the trees seemed to me to hang down as though in mourning and most of them had lost half their bark. The old bark was black and hung in long streamers down the trunks like dishevelled hair, while the new bark, white or silver-gray, looked very pretty by contrast.

In some places there were groves of dead trees. They

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had been ringed with the axe to kill them for clearing and stood stark and gray without leaves or bark. In the glare of the bright sun their limbs looked like clean and well-polished bones. A dead Australian forest is a veritable skeleton forest, the deadest-looking thing in nature. Where the trees have been felled the stumps are perfectly white, the logs lying on the ground are white, and the whole makes one think of a bone yard.

When we passed over the Darling Downs we travelled for miles across green fields as flat as a floor surrounded by wire fences, which enclosed great flocks of fat sheep and herds of sleek cattle. On the ploughed lands the soil was as black as that of the Nile Valley and the dark ground looked soft and velvety in the brilliant sunlight. We crossed tracts each of a hundred acres and more of luxuriant alfalfa, and again went through fields where the green blades of wheat were just poking their tips up through the dark earth. Where a stream had made a deep cut I could see that the rich top soil was many feet in depth.

There were but few farm outbuildings, no big barns, and no farmhouses of any great size. The homes were one-story cottages of wood painted yellow and roofed with galvanized iron. In spite of Australia's huge forests, wood is still expensive and galvanized iron is largely used. Most of the houses had big round iron tanks on their porches to catch the rain from the roofs. Many had galvanized iron chimneys, and a few were built entirely of this material, which is imported from England.

I noticed that some of the cottages were set high up on iron piles capped by iron saucers with rims turned down, in the same way that the American farmer protects his

granary from the rats. The upturned saucers are used to keep out the white ants which will devour almost any wood or leather they can get hold of. In tropical Queensland the piles have another advantage; for they permit a circulation of air under the houses, cooling the floors.



Bondi Beach, near Sydney, is the resort of thousands. Though sometimes accused of overdoing it, the devotion of the Australians to outdoor pleasures has helped make them a healthy, vigorous people.



The water traffic of Sydney harbour centres at the Circular Quay, where all the ferries dock, and the street-car lines converge. The ferry system is one of the largest and most efficient in the world.



On the narrow neck of land separating Sydney harbour from the ocean is Manly Beach, which divides honours with Bondi as a place for surf bathing. On the hills some of the wealthy business men have their mansions.

CHAPTER VI

WALKS ABOUT SYDNEY

OME with me for a walk through the city of Sydney. The sun is hot, but the porticoes of iron and glass, built out over the sidewalks, will protect us from its rays. We stroll by great stores with fine window displays, and find we can buy almost anything here that is to be had in New York. The prices are marked in pounds, shillings, and pence. Some of the department stores sell several million dollars' worth of goods annually and employ from five hundred to one thousand clerks. Such stores do a big mailorder business with the people on the sheep stations and farms of the "back blocks."

One feature of Sydney is the numerous arcades that are cut through from one street to another and lined with stores. They are ceiled with glass, paved with tiles, and decorated with tropical plants and flowers. They are delightful quarters in which to shop during the heat of the day.

The principal artery of the business section is Circular Quay, where the many ferries to the suburbs move in and out with their thousands going to and from work. The main streets of the down-town district lead to it. On Macquarie Street is the entrance to the Government House, where the governor of New South Wales resides. This thoroughfare was named for a stern old administrator

of colonial times who used convict labour to put up the Parliament House and other buildings, many of which are still in use. Pitt and King streets are lined with handsome stores and office buildings. Above Circular Quay are great concrete wheat elevators with a capacity of six million bushels, which were erected not long ago under American supervision.

Sydney has big insurance buildings, bank buildings, excellent clubs, and many hotels. The two largest hotels are the Australia and the Wentworth, which have the features of the best American and European houses. The prices are about the same as in the United States, though at first they seem cheaper. The extras make up the difference. There are small hotels in every block, but most of these are merely saloons, or public houses, with a room or so for rent to conform to the law providing that liquor shall be sold only at places offering board and lodging as well as drinks.

There are some splendid public buildings. Take the town hall, for example. It is a magnificent stone structure in the heart of the city, containing a pipe organ, which is the largest south of the Equator, and a hall seating five thousand people. Some years ago the city of Melbourne bought what was then the largest organ in Australia. But Sydney was, of course, bound to beat Melbourne, and bought a bigger one. Her organ cost eighty-five thousand dollars, and has several thousand pipes.

Other fine structures are the Public Works office and the buildings of the various state departments. On George Street is the Victoria Market, put up at enormous expense to serve the whole city. But it did not succeed

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and has now been turned into offices. Throughout the city and suburbs are a number of well-regulated municipal markets.

In the down-town section is the office of the Sydney Bulletin, the most widely read paper in the Commonwealth. This bright pink weekly has been called a "cross between the London Punch and the New York Nation," for its contents are both grave and gay. But it also has a flavour peculiarly its own. For one thing, it is so full of slangy phrases that outsiders almost need a glossary to understand some of its paragraphs. In it "Bananaland" may stand for Oueensland; "Apple Isle" for Tasmania; the "Ma State" for New South Wales; "Fog Land" for Great Britain; the "Big Smoke" for London. Under the heading of "Aboriginalities" are paragraphs from correspondents throughout the country on matters relating to Australian place names, natural history, strange customs, and the like. The tone of the paper is often flippant, and, so the conservatives say, even irreverent and disloyal.

Nevertheless, the *Bulletin* is doing much toward building up an Australian literature, for its encouragement and prompt checks have kept going many a struggling young poet or journalist. It is the chief literary and dramatic paper of the country, and its so-called "red page" always carries able book reviews and criticisms. Politically, it is independent, although it inclines more to the Labour than to the Liberal view. Still, it does not hesitate at times to publish editorials denouncing the Labour leaders. It is Australian of the Australians, and is read in the towns and cities, in the scorching northern mining camps, in the remotest sand plains of

the west, and in the isolated sheep stations of the "bush."

Sydney has as good lungs as any city of Europe. It is noted for its extensive park system. Moore Park contains more than three hundred and fifty acres, Centennial Park five hundred and fifty acres, and there are also the cricket fields, race courses, and fair grounds. One of the best zoos of the world is at Taronga Park on the north side of the harbour. Here cages have been largely dispensed with, and the animals are given as nearly as possible their native conditions and surroundings. The Botanical Gardens are on the spot where the early convicts raised their vegetables.

Sixteen miles south of Sydney is the National Park, which contains more than thirty-three thousand acres, most of them covered with virgin forest. Convenient to the city there are also a number of sandy beaches where "surfing," swimming, and fishing are enjoyed. At the Manly and Bondi beaches "surfing" is especially popular. It is the sport of expert swimmers, who throw themselves on boards on which the incoming waves dash them to shore. The pastime is borrowed from the South Sea Islanders and is especially adapted to the heavy surf of the Sydney beaches.

The most interesting park in all Australia is the Domain. It is in the centre of Sydney and has magnificent trees, velvety lawns, and walks and drives of every description. The park is accessible to everyone; there are no signs to keep off the grass, and babies and grown-ups play and stroll upon it.

Every Sunday afternoon the Domain becomes the forum of the people. Any one who wishes to preach or pray or

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talk politics has a right to set up his pulpit on the grass and toot for hearers. No one questions his doctrines, and he may say what he pleases. There are at least a score or more of such speakers here every Sunday, each with a crowd about him. There are lightning calculators, labour agitators, Socialists, preachers of every gospel and every creed, phrenologists and beggars, faith healers and cranks of all sorts.

The crowd is a good-natured one, made up of all classes, but with working people in the majority. When I visited the Domain the other Sunday, there were at least twentyfive thousand persons there. I paused for a time at each group. The first was gathered about a lightning calculator. who talked a blue streak as his hand danced over a blackboard, stopping only at intervals to sell books explaining how to learn the higher mathematics in three lessons. The next speaker was a temperance orator. He was criticizing the rich men and the officials of the city and denouncing the saloons. Beyond him was a Socialist, who demanded heavier taxes from the rich and a general division of property, and farther on was a Negro, who was preaching the end of the world in a marked Yankee accent. At another place a Salvation Army band was led by a woman with a sweet singing voice and a complexion as fair as that of a baby.

About fifty feet from this crowd I saw a walking hospital in charge of a woman called "the Good Samaritan." The old lady had thirteen invalids, each of whom was terribly afflicted. They were of all ages, from babies to threescore and ten—some lame, some halt, and some blind. They sat about in chairs on the grass while the Good Samaritan in their midst showed their sores and deformi-

ties to the crowd and begged money for their support. She had a carpet laid at her feet and upon this the charitably inclined cast their pennies and sixpences.

Near by was a blind man with a cracked voice and a fiddle, who sang and sawed for money, and farther over an orator haranguing about the big captains of industry in America. They were, he said, enslaving the Yankee labouring men, and would in time probably come over to place the yoke of bondage on the workers of Australia.

All this discussion in the different parts of the park went on without commotion or trouble; every one said what he pleased and none bothered about what anybody said.

Leaving the Domain, I walked back to the hotel, noticing the queer signs by the way. One was "Lollies for Sale." It was over the door of a confectioner's store where all sorts of candies were displayed. "Lollies" is the popular word here for candies, and between the acts at the theatres boys go about through the audience calling out "Lollies, ladies! Lollies, gents! Does any one want a box of fine fresh lollies?" So, I suppose, America is indebted to Australia for its "lollipops."

CHAPTER VII

THE LAND OF THE GOLDEN FLEECE

HERE were large flocks in the days of the patriarchs, when Abraham and Lot had to separate to get new grazing grounds. It is written that King Solomon sacrificed one hundred and twenty thousand sheep when he dedicated the Temple at Jerusalem, and we know that Mesha, King of Moab, gave Jehoram, King of Israel, one hundred thousand lambs as tribute. We have read also of Job's "cattle upon a thousand hills." The sheep kings of those days must have had immense farms, but they were nothing in comparison with those of Australia. In the state of Victoria there are six sheep stations of more than one hundred thousand acres each; in New South Wales are nearly two hundred of like area, and Queensland has ranches so extensive that one will support upward of one hundred and forty thousand sheep. In the whole Commonwealth there are eighteen estates carrying more than one hundred thousand head each.

Yet, even at that, there are old timers who consider these farms small. In the early days, when land was taken up in great parcels at less than nominal rates, there were men who acquired tracts the size of the state of Rhode Island. James Tyson, one of the most noted of the stock kings, owned three million acres and died worth twenty millions of dollars, an unheard-of fortune at that time.

Samuel McCaughey, who came to Australia practically penniless in 1856, when sheep raising was on the decline because of the gold fever, picked up blocks of land and bought flocks of sheep until he finally had one million head, owned a million acres outright, and leased a million or so besides. At one shearing he clipped a million and a quarter pounds of wool.

Nowadays the tendency is away from these enormous holdings. With a view to getting more people on the land, all the state governments have done something toward their reduction. Moreover, closer settlement frequently means greater production from the land, for the smaller holdings are not generally devoted to sheep alone, but are used for wheat growing, dairying, and other farming as well. In districts where at one time a property of two hundred thousand acres was thought not too large to provide for one man and his family, five thousand acres is now considered a good pastoral proposition. Sometimes a five-thousand-acre farm, well cultivated and improved, pays better than two hundred thousand acres did in the past.

The sheep ranches used to be merely wild lands, where flocks were grazed on the hills and valleys with a few shepherds to watch them. The present sheep stations are more like farms. The land is fenced in great fields, or paddocks, of eight hundred acres or more. Some contain several thousand acres, and single paddocks may have from two to twenty thousand sheep. Our American consul at Sydney tells me of one station he visited, which had wire fencing enough to reach from New York to San Francisco, enough roads to make a highway from New York to Baltimore, and enough employees to populate a



In the great "back blocks," where sheep ranches of 100,000 acres are common, it takes days and even weeks for the bullock drivers and their teams to get the wool clip to the nearest railroad.



The Australian sheep men have brought the Merino to its highest perfection and doubled the weight of its average fleece since the breed was first introduced.



Though the snowfall is confined to a few isolated areas, the slopes of Mount Kosciusko, which is more than seven thousand feet high and the loftiest peak on the continent, are the scenes of real winter sports.



Even about the winter's ice on the mountain lakes of Victoria the trees are as green as in the spring, for the eucalyptus sheds its bark instead of its leaves and makes the country an "evergreen land."

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good-sized town. I have travelled over other stations quite as large, and I have been amazed at the vast extent of the fencing.

In the state of New South Wales, where I am now writing, practically all its thirty-four million sheep are kept in fenced paddocks. There are thousands of miles of wire netting put up to keep out wild dogs and rabbits. Millions of dollars have been invested in buildings, and the salary list of a great station may be as long as that of a department store. Sheep raising is by no means a cheap business and to make it pay everything must be carefully managed.

It costs from fifteen to twenty thousand dollars a year to run even a good-sized station and there are some ranches on which the annual expenses mount up to hundreds of thousands of dollars. Of late years wages have steadily increased, until the men are now paid from five to nine dollars a week with board and lodging. Each man receives weekly about twelve pounds of meat, ten pounds of flour, and a quarter of a pound of tea, as well as other rations, so that every big farm must keep a store and a warehouse. Even the smaller stations have a dozen or more men in ordinary times, and at shearing season the hands are numbered by scores. Then there is the land itself, which, when taken in tracts of tens of thousands of acres, costs the purchaser or tenant a large sum of money. The rates for leases are different in the several states, but in all there are farms paying annual rents of thousands of dollars.

The ranchers are called "squatters," which in Australia is not a disparaging term, as with us. It was first applied to those who settled on unoccupied lands, and then to those leasing vast tracts from the government at nominal rentals.

Since these men often grew to be rich, the title became a complimentary one and it is now applied to stock-owners and graziers generally.

The squatters are Jasons who have won a splendid Golden Fleece. Of the five hundred and fifty million sheep in the world, Australia has around eighty million, or more than any other country. Russia, Argentina, and South Africa come next, in the order named. Australia's yearly wool production runs to between six and seven hundred million pounds and her annual wool exports have been bringing her the sum of two hundred and fifty million dollars. Wool is her greatest single source of wealth. Her sheep also furnish exports of frozen mutton that in good years have increased her income by twenty-five million dollars. The annual exports of sheepskins are sometimes worth fifteen million dollars, and sausage casings, made of the intestines of sheep and lambs. are sent overseas to the value of five hundred thousand dollars.

During my stay here I have attended Sydney's annual sheep show. There were hundreds of fine animals from every part of Australia. More than half of them were entered in the fine-wool class, and the rest were fat sheep raised for mutton. Every sheep at the show was worth several hundred dollars, and some were valued at thousands. Among the latter was the ram that took first prize. It was a great barrel-shaped bale of wool with a pair of big horns at one end of it. The wool lay on the ram in folds and rolls, the skin apparently wrinkling itself in order that the animal might hold more. His ears were entirely hidden by the wool, which also came out three inches over the eyes, leaving only small holes for the

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ram to see through. I poked my finger into the fleece and could just touch the skin. The wool hung down in great bunches on the belly and the legs were covered clear to the hoofs. On the outside the fleece was of a dirty white colour, but when I pulled it apart I could see it was of a rich creamy white. The strands were spiral and springy and very fine.

The Australian farmers pay more for blooded sheep than do those of any other country. It is not uncommon for a well-bred ram to sell for five thousand dollars and one has even brought more than thirty thousand dollars.

The hundreds of sheep men at the show looked much like a crowd of Yankee business men. They were all landholders, and many had farms which would be considered principalities in the United States, but some of which are looked upon as quite small here. For instance, at the dinner closing the event I asked whether the vice-president of the show had a large station. The reply was that he had not, for his holdings comprised only about sixty-five thousand acres. Another man pointed out to me owns two hundred thousand acres and another has half a million acres, all fenced.

CHAPTER VIII

IN THE GREAT WOOL MARKET

YDNEY is the chief wool market of Australia. It annually ships hundreds of millions of pounds to Europe, Japan, and the United States, and it has some of the largest wool warehouses on the globe. Let us take a walk through one of them. We are in a great room covering many acres. It is roofed with glass and upon its floors are thousands of bales of wool, each as high as your shoulder and marked with the name of the station from which it came. All are wrapped in yellow bagging, but the tops are open and the white wool seems to have burst forth and to be pouring out upon the floor.

In parts of the warehouse are mountains of wool which have been taken out of the bales, and in other places men are repacking the wool for shipment. Thrust your hand into one of the piles. Now look at it! It shines as though it were coated with vaseline and your cuff is soiled with the grease; for this is unscoured wool, just as it came from the sheep's back.

All of the Australian wool clip is sold at auction, and the sales are attended by wool buyers from England, continental Europe, the United States, and Japan. We see many of them in the Sydney warehouses dressed in overalls and linen coats to protect their clothes from the greasy wool. They go from bale to bale, taking notes of each

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man's stock, in order that they may know how much to offer when it is put up at the Sydney Wool Exchange.

The Exchange is near the wharves in the heart of the city. It is a long, narrow room, much like a chapel, with an auctioneer's desk like a pulpit in one end of it. The various wholesale dealers or commission merchants are allotted different days on which they may auction off their stock, and on those days the buyers come to bid. As many as ten thousand bales are sometimes sold in one day, and single sales will foot up as much as three quarters of a million dollars. Cable reports are received as to the prices in the great wool markets over the world, and the excitement rises and falls with the quotations.

I had a chat with one of the largest wool dealers. He told me that some years ago almost all the wool of Australia was shipped by the squatters direct to London, and there resold and reshipped. At present the greater part of the product is shipped to commission agents at the Australian ports, to which the textile-manufacturing countries send their buyers.

The prices of wool vary according to quality, and the quality varies with the breed of the sheep and the part of the animal's body from which it is clipped. The coarse wool sometimes brings only about eighteen cents a pound, but for the last ten years the price of the best wool has averaged forty-four cents a pound in Australia and has gone as high as a dollar a pound in London. Some flocks have won such reputations for producing fine wool that their fleeces always bring better prices. I have before me a list of some of the wool sales of one year, showing that certain wool growers got as much as five cents a pound more than the market rates.

Few people realize how many factors enter into the quality of wool and go to determine its value and use. The grading of wool is a science and must be done by experts. It is taught in the agricultural colleges of Australia, and at Sydney there are night classes where the students learn about sheep and wool. They study the different breeds, and practise grading and classifying baled wool. which is sent to the school by the dealers. In apron and overalls, each student goes through the bales picking out the good and bad wool and sorting it according to quality. He is taught also how to shear sheep, how to scour wool, and, in fact, every process in the growing and marketing of the product. The English mills often send their young men to Australia to learn the business at first hand. Some vears ago there was a blind buyer at Boston who operated with success, making his purchases by the touch and odour. He could tell not only the quality of the wool, but the section of the country or the part of the world from which it came.

Because it is well adapted to dry climates, the Merino sheep is the breed preferred in Australia, although the strain is modified by cross-breeding to suit different conditions. The sheep on the great plains country are of the large, robust type found to give the biggest returns on such areas. On the highlands, where the pasturage is lighter and the climate colder, a small Merino is raised that yields an extra fine fleece. In the western part of the state of Victoria is still another type, which produces the best Merino wool in the world. Upon this wool certain mills in Europe, America, and Japan are absolutely dependent for the manufacture of some of their goods.

Wools differ in their wave or curl and in other partic-

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ulars that will show up in weaving. The other day I was shown some Merino wool under the microscope. To the naked eye the wool, as it comes from the sheep, seems to be made of fine curly hairs. It is only by putting it under a microscope that one can see it differs from hair. Enlarged to the size of a lead pencil, each wool fibre is seen to be covered with sharp scales which overlap one another like those of a fish. The scales are so close together that there are several thousand of them on a piece of the fibre an inch long. The fibre is so fine that a pound of it can be spun into a thread one hundred miles long. When wool is spun and woven, the scales interlock and thus give the thread or fabric its strength.

I have had a talk about the growth of Australia's wool industry with one of the old-time squatters, a man who has been raising sheep for many years and who has now about fifty thousand head in two different stations. Said he:

"We have fewer sheep in Australia than we had ten years ago. Here in New South Wales we then had nearly forty million, and to-day we have approximately thirty-three million. We have lost some by drought and some by overstocking, and have now just about what we can easily feed."

"Where did your first sheep come from?" I asked.

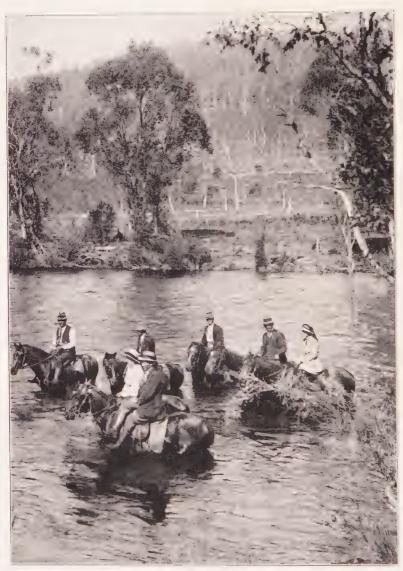
"They were brought over from England by the convicts," was the reply. "When Captain Phillip came here in 1788 he brought twenty-nine sheep and other live stock. These sheep did very well, and a few years after that Captain Macarthur started the movement to make a sheep country of Australia. Macarthur was a military man with a scientific bent. He had a farm near Sydney

and experimented in crossing some East Indian rams and Irish ewes, and as a result produced wool better than that of either of the forebears. He then experimented with the Merinos. You know, perhaps, that up to that time the finest wool all came from Spain, which had always been noted as a sheep-breeding country. Hoping to keep a monopoly of the trade in the best wool, the Spanish government forbade the exportation of any Merino sheep. But Captain Macarthur got some from the flock of King George III of England, who had originally secured them from the King of Spain, and also imported several Merinos from South Africa.

"The British government gave him a grant of ten thousand acres of land on which to continue his experiments, and in a short time he proved that Australia could produce sheep as well as Spain and that Australian wool was as fine as the Spanish. It was long before the wool exportations amounted to much, but the flocks steadily increased and the character of the wool improved, until now we raise more wool and better wool than any other country on earth."



Australia's greatest single source of wealth is sheep, of which she has more than any other country in the world, producing a half billion pounds of wool, besides vast quantities of mutton.



Bush life is not all isolation and hard work. Every big station has its saddle horses, and both men and women are accustomed to long rides to dances, tea parties, or picnics.

CHAPTER IX

LIFE ON THE SHEEP STATIONS

OME of the Australian squatters and their managers live like lords. Their low, one-story houses roofed with galvanized iron have a score or more rooms looking out over wide verandas that run along the front. There are many servants and the station is often more like the estate of a feudal baron than that of an ordinary farmer. Most of the sheep men are well educated, many are college-bred, and their homes show all the evidences of culture and taste. One squatter has a picture gallery that cost him one hundred and twenty-five thousand dollars, and others have music rooms and fine libraries. The leading Australian and London newspapers are to be found at all the stations. Whatever else is lacking, one is sure to see a well-read Sydney Bulletin lying about.

Most of the stations have large stables, with horses for the use of the men employed on the estate and for pleasure riding and driving, as well. They are usually well supplied with guns and fishing tackle, and not infrequently have tennis, cricket, croquet, and golf grounds.

Far from being slack about social forms, the people on the best sheep stations are more careful about matters of etiquette than those in the cities. It is the usual thing to dress for the evening, and, although there may not be a stranger within fifty miles, the men will appear night after

night in dinner coats and the ladies in décolleté gowns. In travelling through the country every gentleman carries a dress suit with him. If he goes away from the railroad he usually tucks his evening clothes in his saddle bags or in the back of his automobile.

No matter how far out in the country they may live, both men and women pay a great deal of attention to dress, and on some of the stations a hundred miles from nowhere the latest fashions are as much in demand as in the Australian metropolis. Many of the belles of the Queensland "bush" come regularly to Brisbane and carry back wardrobes to astonish their rivals. The fair country girls of New South Wales get their fashions from Sydney and those of Victoria send to Melbourne for new clothes once or twice a year. A great deal of ordering is done by mail. One reads a good deal about the loneliness of the life in the "bush," or "out back," or "in the back blocks," as the rural districts of Australia are called here. But it is my observation that, except in the most sparsely settled areas, the station dwellers have a social life of their own. For one thing, they have become used to the great distances and make nothing of visiting trips that we should consider long journeys. It is not uncommon for a young man or a young woman to ride or drive fifteen miles to take a cup of tea with a friend. At the dances, guests come from forty and fifty miles around, dance all night, and then start back at daybreak. The stations are noted for their hospitality. When a caller arrives, whether friend or stranger, everyone takes it for granted that he will stay overnight.

The automobile has worked wonders in both the social and the business life of "outback" Australia. Long inspection journeys or trips to town are now easier mat-

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ters than when horses were the sole means of getting about. A homestead may be one or two hundred miles from the nearest railroad station, but the owner thinks little of running in to take the train for a business trip to the city. Sometimes, of course, the country is soaked with rain and the motor cars must be laid up for a few days. But, in general, the automobile has replaced other vehicles and is considered an absolute necessity. This is especially true for those who run several stations. I have heard of one man, for example, who has five ranches at an average of seventy-five miles apart. Two of these he visits every week, while he gets around to the others at least twice a month. He keeps a car on each of the properties as well as one at Melbourne, where the stock and wool are marketed. His bill for gasoline, oil, and repairs is more than five thousand dollars a year, but he considers this merely necessary overhead, as he says he could not well carry on his business without the cars.

Saddle horses are still indispensable on the big farms, however, and there seems no likelihood that Australia will ever stop breeding the fine horses for which she is famous. Besides, these people are racing enthusiasts, and there is great rivalry between the stables of many of the sheep men. Every town has its track, to which the station men come from a hundred miles around whenever there is a race meeting.

The big stations are often owned by syndicates or wealthy men living in Sydney or some other city, the ranches being in charge of managers, some of whom started in as "jackeroos." "Jackeroo" is the name given the young man who begins as a ranch hand with the idea of learning the business. In the old days he was frequently a

well-born young Britisher sent out ostensibly to gain experience in sheep raising, but really to be kept out of the way of mischief at home.

The "jackeroos" were divided into classes, each with its special nickname. The "gold tail" paid sometimes as much as fifteen hundred dollars for the privilege of watching the sheep and learning how to handle them. He usually stood well with the proprietor and had something of a place in society. The "silver tail" paid nothing and, as a rule, got nothing except experience, while the "copper tail" was paid a small stipend for his work. The "experience" of the "gold tails" usually consisted in hunting, galloping at breakneck speed over the vast plains, horse racing, and making love to any attractive girls they could find. After a year or two some returned to Old England. But many stayed on and became real sheep men, winning their share of the Golden Fleece.

To-day the "jackeroos" are sober and serious young fellows, mostly sons of overseers, managers, and small graziers, who get wages from the start. Their status differs from that of the other station hands only in their having separate living quarters and, on some ranches, eating at the owner's or manager's table.

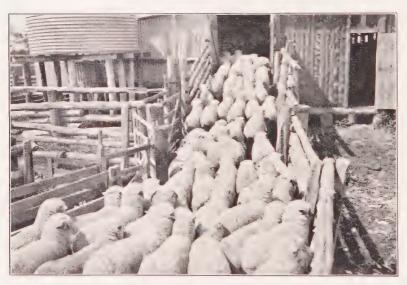
A big sheep station nowadays is, as I have said, a large-size business proposition, requiring competent managers and overseers. On the more important stations there are bookkeepers and storekeepers. Nearly every one has its blacksmiths and carpenters, its gardeners, hostlers, garage men, and men of all work. The managers are skilled men who get high salaries, for the station's profit depends largely upon them. They are usually expert sheep



Like the men, the women on the sheep stations are much out of doors, and many of them have in times of necessity taken over the management of great flocks.



Shearing sheep is done with machine clippers, which are quicker than hand shears, less wasteful of the wool, and not likely to wound the sheep. A good workman will shear one hundred sheep a day.



Australia supports sixteen sheep for every person in her population. Millions of acres of land unsuitable for farming or cattle furnish sufficient pasturage for sheep.

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breeders and are always trying to improve their stock. I know of one manager, for instance, in charge of fifty thousand sheep, who asserts that he has increased his wool crop more than seventy-five thousand pounds a year by developing sheep that yield heavier fleeces. At an average of, say, thirty cents a pound, an additional seventy-five thousand pounds of wool would mean twenty-two thousand five hundred dollars a year more profit, or enough to pay the salary of an expensive manager several times over.

I might be inclined to doubt this manager's claims had I not learned from government officials that the average weight of the Merino fleece for all Australia has been increased by three pounds. This is largely the result of expert breeding. Some of the best fleeces now run to eight and nine pounds each.

The sheep-station men who lead the most lonely lives are the boundary riders. They go along the fences day after day and see that the gates are closed and everything is all right. They spend their time in the saddle, riding forty, fifty, and sometimes a hundred miles daily. They carry their blankets with them and sleep on the ground, hobbling their horses beside them.

The real aristocrats of the sheep business are those who clip the wool from the animals' backs. Sheep shearing is almost a profession in Australia. There are thousands who do nothing else, and they form one of the most important classes of Australian workmen. In the old days the sheep shearer was dependent on the wool growers, taking work wherever he could get it and living in any kind of quarters the station might see fit to give him. But this has changed, and now he dictates terms to the sheep men,

with special laws in every state to back him up. The employer must provide decent accommodations and had best handle the men with gloves, or else he will have to reckon with the shearers' union, one of the most powerful in the Commonwealth. When shearing time comes, the squatter signs a contract, made out according to a prescribed form; and, as a rule, this agreement is rigidly lived up to by both parties. One of the union rules most strictly enforced is that no shearer can be compelled to shear wet sheep. Yet, if he has arrived in the station and finds the sheep wet, he must be paid for the time he waits for their wool to dry out. This is sometimes a hardship for the employer, for even in dry seasons the heavy fleeces absorb considerable moisture.

The season lasts for nine months. Gangs of shearers start in Queensland, where it is warmest, and then work their way south from station to station until they reach the island state of Tasmania. From there some of the shearers go over to New Zealand, which has a still later season.

Every station has its shearing shed, with barracks for the men. The shearers furnish their own food, buying it of the squatter at wholesale prices. Each gang of shearers has its own cook, and they usually live very well.

In the past many of the shearers were drunkards. They would work at a station until the job was completed, and then take their wages to the nearest public house and there consume them in liquor. Sometimes, they would hand their money over to the saloon-keeper and tell him to keep an account and put them out when the money was gone, a bargain promptly fulfilled by the publican. To-day many of these men are frugal and temperate. They

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shear for a few years, getting a thousand dollars or more a season, and then invest their savings in stock of their own.

Nowadays the sheep are practically all sheared by machines, somewhat like a barber's clippers, which are run by steam, compressed air, or electricity. The clippers are fastened to a flexible tube like that connecting a dentist's drill with its motor. They consist of little knives which move backward and forward over each other at the rate of two thousand times a minute and cut through the wool as a hot knife cuts through butter, taking it off more smoothly and cleanly than by hand. I have seen sheep shorn in this way so that their skins were as smooth as the nap of fine cloth, and as they scampered off they seemed to be clad in soft, white, velvety coats. The managers tell me that, as compared with shearing by hand, the machines save from a quarter to a half pound of wool per sheep, and that there is less danger of cutting the skin than in hand shearing. The average number shorn by each machine is a little more than one hundred per day. Some men can shear more than one hundred per day by hand, and one man is known to have cut the wool from three hundred and twenty-one sheep in one day with a pair of hand shears.

After the wool is shorn it is sorted according to the part of the animal from which it came. On some stations it is put up in bales of three hundred and ninety pounds. Getting the wool to market is a considerable item in the station's expenses, especially if it is situated far from a railroad. While motor trucks and tractors are coming into use, much of the clip is still hauled on carts drawn by oxen. Some carts will carry ten tons, a yoke of eight or ten oxen being used to pull them.

The bullock drivers, or "bullockies," as they are called in this land of nicknames, are familiar figures in Australia's sheep country. Many of them have no other homes than their great, creaking carts, and these often form the homes of their families as well. Such outfits sometimes even include goats to furnish milk on the way.

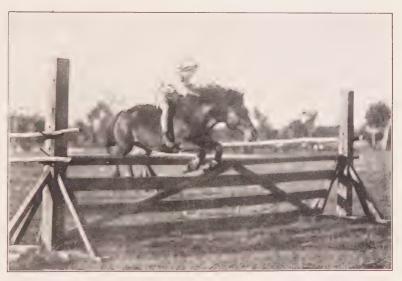
The "bullockies" spend their lives crawling along the lonely roads behind their slow-moving oxen. In the back blocks they will tell you stories of big loads and record trips. One bullock driver hired a brass band to meet his biggest load of wool at the edge of the railroad town, which he entered with a flourish that brought all the population out to do him honour. A New South Wales "bullocky" drove a team of forty-two oxen ninety-two miles with a load of one hundred and forty-four bales of wool. His team was yoked four abreast and they were kept on the move by the cracks of a whip loaded with ten pounds of shot to weight the lash. Their driver probably used also a steady stream of the profanity for which all Australian "bullockies" are noted.

Another character of the life of the sheep stations is the "sun-downer," a tramp whose like I have not met in any other part of the world. He will not work, but he travels about on foot from station to station, carrying a can for making his tea and a blue blanket for a bed. From the colour of his blanket he is sometimes called a "humping bluey."

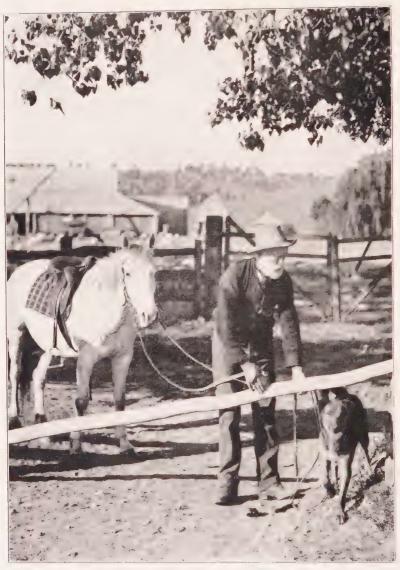
When the "sun-downers" arrive at a station they call upon the manager, demand food, and always get it. They are so common that custom has fixed their ration at one pound of flour, half a pound of sugar, and two ounces of tea. In some places little shanties have been put up to accom-



Many a sheep station is a community in itself, with its carpenter and blacksmith shops, its laundry, and its outlying houses and native huts clustered around the dwelling of the owner or manager.



From the time he can be lifted to a horse's back, the Australian is an enthusiast about riding and racing. Even a small meet may be the signal for a general holiday and an exodus from work.



The boundary rider is much away from home, spending his days in the saddle and many of his nights in the open. It is his job to see that the rabbit fences are intact, the gates closed, and the flocks secure.

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modate them overnight. Some of these tramps are men who have made a failure in Australia, but many of them are rovers from all over the world, ship deserters, and adventurers, who, after a season or two, move on to some other land.

CHAPTER X

RABBITS AND DINGOES

IR HARRY LAUDER tells a story of a Scotchman visiting a farm in the Australian back blocks. Said he to the farmer:

"I notice that you're Scotch."

"Yes," replied the farmer, "and my wife, too."

"I dare say," said the visitor, "there are many Scotch people in these parts."

"Yes," was the answer, "we have quite a lot of Scotch folk, but that isn't our real trouble—it's *rabbits*!"

When the Australian stockman has a nightmare, he dreams of a rabbit, the pest of the Commonwealth and the terror of the pastures. There are tens of millions of rabbits all over the **country**, and but for the constant warfare against them they would eat up all the grass of Australia. Hundreds of stations have been ruined by them, and the larger places employ men to do nothing else but destroy them. Some of the rabbiters kill an average of four hundred rabbits a day. Yet those that survive cost Australia countless millions of dollars, and the end of the plague is not yet in sight.

Enormous rewards have been offered for a method of exterminating the pests. The government of New South Wales once promised one hundred and twenty-five thousand dollars to any one who would suggest or invent a means for their extermination throughout the state. The

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reward was never claimed, and the rabbits breed and breed and never stop breeding. A pair will produce six litters a year, and each litter will average five rabbits. As soon as the bunnies are six months old they begin to breed, and in five years a single pair will increase to ten million pairs. One can gain some idea of what this means from the fact that every family of seven rabbits will eat as much as one sheep.

The man who first brought rabbits to Australia was a squatter near Melbourne who wanted something to remind him of home. Besides, he thought hunting wallabies, kangaroos, and wombats was poor fun in comparison with the good old English sport of "chasing the hare." He soon found, however, that hunting rabbits was a serious business. They multiplied so rapidly that his station was overrun. His pasture disappeared, and do what he could, they increased by thousands. They eventually cost him more than two hundred thousand dollars in loss of stock, in addition to the money he spent in his attempts at their destruction.

Among the best methods of controlling the pest are poisoning, fencing, and the paying of bounties. In poisoning, coarse bran saturated with phosphorus is sometimes sown in furrows, and so covered that stock will not get it, though the rabbits will burrow for it. The great drawback of this method is that it also kills numbers of insect-destroying birds.

Another system works well in dry seasons and in areas where water is scarce. Tanks, water holes, and dams are surrounded with wire netting, and troughs of poisoned water are placed outside. Often the trough, too, is enclosed in wire with a hole in it just big enough to let in a

rabbit. In this way, the bodies of the poisoned rabbits can be collected, skinned, and burned. It is dangerous to leave the dead animals to dry up in the sun where stock grazes, for when grass is scarce the cattle will eat the carcasses for the sake of the salt in them. This method, too, exterminates numbers of insect-eating birds, so it has its disadvantages, though it does kill thousands of rabbits. I have heard that in one of the drought years, when the rabbits were more numerous than they are now, three million were poisoned at a single water hole.

But fencing and bounties have proved still more effective than poisoning. The local boards in infested districts pay millions of dollars for rabbits killed, and states and individuals spend millions on fences. According to the definition in the South Australian law the "rabbit-proof" fence must be of wire netting three feet high, set four inches into the ground, and topped by one strand of barbed wire. A "vermin fence," which is put up to keep out "rabbits, wild dogs, and foxes," is built like the rabbit-proof fence, except that it is four and one half feet high and has three strands of barbed wire at the top. These fences form a network over the land and make the stone-walled fields of New England look like mere chicken runs in comparison.

They are even built across the roads, so that travelling along the highways is often a dreary business of opening and closing gates in the rabbit fences. In some sections where there are gates about every five miles, the men passengers on mail coaches usually arrange "gate watches" between them. There is a heavy penalty for leaving one open.

The extent of the fences is amazing. One built by the

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government of New South Wales along the South Australian boundary is three hundred and fifty miles long. Southern Queensland has one six hundred and twelve miles long. The state of South Australia has more than enough to make a girdle round the earth, and New South Wales has spent more than thirty millions of dollars in building her one hundred thousand miles of rabbit fence.

As a result of these various measures, in the more closely settled areas the rabbit pest is pretty well under control and is now at its worst only in lands so poor that it is unprofitable to fence them.

Moreover, the rabbit has in recent years been made to pay something for his keep. Frozen rabbits are shipped to the markets of Europe to the number of twenty millions a year, and along Australian country roads one may see thousands of rabbit carcasses hung on fences awaiting wagons to take them to the packing houses for freezing. Rabbit skins worth some eighteen million dollars are annually exported for making felt hats, coat linings, and women's furs.

In the early nineties, when the news of the discoveries of the great German bacteriologist, Doctor Koch, was being flashed about the world, Australia hoped that some bacillus might be found that would rid her of her rabbits. It was claimed that an assistant of Pasteur had found a culture which would spread an infectious and deadly disease among rabbits, but from which other animals would be immune. Pasteur was invited out to Australia to try out this specific, but, as he was too old to undertake the voyage, he sent a representative. A small island stocked with every kind of animal on the continent was handed over to this scientist but he failed to satisfy the authorities that

his system of inoculation could be carried out without danger to other animals, and so the wonder-working bacillus is still to be discovered.

The states have had no better luck in introducing other animals to prey upon the rabbits. Some years ago West Australia turned two hundred cats into one of the rabbit districts, thinking they would exterminate the vermin. When the government inspectors went around a year later to check up results they found that the cats were living in the rabbits' burrows on the friendliest terms with their long-eared landlords.

Foxes were brought in with the same object as well as for sport. But now that Reynard takes annual toll of about one hundred thousand sheep the foxes are shot, trapped, poisoned, and fenced against. In some places they are more dreaded then the wild dogs, or dingoes.

When the Australian aborigines were first seen by the white settlers from England, they had with them many dogs, which they had trained to hunt. Some people claim that these dogs are native to Australia, some that they were brought in by Malay invaders from the north, and some that they are the descendants of a number of sick dogs left by a Dutch vessel on the shores of Australia in 1622. If the last theory is true, the climate must have agreed with the dogs, for they have multiplied and spread all over the country. To this day the southwest corner of Queensland and the northwest corner of New South Wales are badly infested with them. In a recent year dingoes and foxes were responsible for the loss of one hundred and forty thousand sheep in New South Wales alone. Strangely enough, the dingoes generally eat only the tongues of the sheep they kill.

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The "dogger" employed by the station manager to get rid of the dingoes is usually the station rabbiter as well. As he makes his rounds to lay baits of phosphorized grain for the rabbits, he drags along at the tail of his cart a bit of mutton or other fresh meat. At intervals of a mile or so he leaves some meat with strychnine well rubbed into it. The wild dog will follow the trail to the bait, gulp down the meat, and shortly thereafter fall dead in convulsions.

Each sheep station is represented on the nearest local county board, generally by the store-keeper. When the "dogger" presents the scalp and the tail of a dingo, joined by a strip of skin cut along the back, the store-keeper credits him with the sum of one dollar and eighty-seven cents. Three times a year vouchers are turned in to the secretary of the board and the employee receives his check. As a rule the station owner adds enough to make up the amount paid for each dingo scalp to five dollars, so that, whether he is a regular station employee or an independent worker, the Australian "dogger" makes a good living.

CHAPTER XI

WATER FOR THIRSTY LANDS

O OTHER continent has as much dry land or as little rainfall as Australia. It has a great dry heart enclosed in green. More than two thirds of the country has less than twenty inches of rain a year, or about one third of the annual rainfall of New Orleans, and less than half the average for Boston or Washington. You may have heard of Yuma, Arizona, as one of the hottest, driest spots in the United States. In twelve months it gets less than ten inches of rain. Two fifths of all Australia is just as dry.

Australia is the hottest country on record. I have ridden for miles astride the Equator in Africa, and have visited the arid wastes of South America and Asia, but I have never found heat to compare with this. Out in the country in the dry times one feels he is walking on a tin roof over the lower regions, and the people facetiously say that they have to feed their hens cracked ice to keep them from laying boiled eggs. And yet sunstroke is quite rare in Australia.

Along the eastern side of the continent, from twenty-five to one hundred and fifty miles back from the Pacific Coast, is the Dividing Range. These mountains separate the fertile and well-watered coast regions from the drainage basin whose waters flow westward. They also rob moisture-laden winds from the Pacific of much of their burden



Irrigation promises to transform parts of Australia into orchards like those of our Northwest. Her fruits and farm products are already popular in European markets, where the opposite seasons work to her advantage.



Square miles of pasturage have been destroyed and many squatters made bankrupt by rabbits. The larger stations employ men solely to hunt and trap rabbits. A single hunter may kill four hundred a day.



In a year Australia exports 20,000,000 frozen rabbits and \$18,000,000 worth of skins for making felt hats and women's furs. Thus she makes the pest pay some of the cost of fighting him.

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of water. West of the mountains vast plateaus begin and extend for two thousand miles, broken here and there by barren hills and rocky peaks. These plains lie close to or within the tropics, and all day long absorb heat which they give off by radiation at night. Ordinarily this would have the effect of drawing in a supply of moisture from the ocean, but on the Australian continent the heated interior is so immense that not enough moist air comes in to water it.

The few rivers of the country are short and mostly unnavigable. There is, in fact, only one big river system, the Murray-Darling. From its source in the Australian Alps the Murray flows between the states of New South Wales and Victoria, then crosses the southeastern corner of South Australia. It is navigable for small steamers to a distance of twelve hundred miles or more from its mouth. Of its tributaries the most important are the Darling, which crosses New South Wales to join it in the southwestern part of the state, and the Murrumbidgee. The whole system waters a big basin on the eastern side of the continent in which are some of the best sheep farms of Australia.

If you have looked at the map, you have noticed that even if Australia has but few rivers, there are a number of large lakes, especially in South Australia. But these bodies of water help matters little, for most of them are salt, and there are no fresh-water lakes to speak of on the whole continent. All the salt lakes are surrounded by flats of treacherous mud encrusted with salt. In dry years the lakes shrink; then a wet season fills them and the grass springs up all about them.

Australia is not only a land of scanty rainfall, few rivers, and great heat. It is also a land of droughts. A district

that has rejoiced in sufficient rain for one or two years and piled up wealth from its crops and its flocks may have to face a year or more of dryness that shrivels up the face of the earth. One need not go far in Australia to hear of the horrors of drought. Stockmen on their stations far off in the interior sometimes go crazy because the rain fails to come, and many have lost fortunes on account of dry weather. In such times, even a man with thousands of acres and tens of thousands of sheep may have to sit help-less and watch the animals die before his eyes.

The droughts clear the land of everything green. The pastures become as bare as the roads, and the sheep stagger about, nosing in the dust for the seeds of grasses and trees. Sometimes trees are cut down to give them food. During one drought a sheep-raiser who had four thousand acres of land kept one hundred men busy cutting off the branches of his apple and other trees to feed the flocks. The sheep ate the leaves and even the twigs. This same man had another gang skinning dead sheep as fast as they died, and a third whose business it was to lift up the exhausted animals when they fell. This was to keep them from the carrion crows hovering about over them ready to peck out their eyes. During these droughts one may see the bodies of kangaroos lying here and there upon the plains. Thousands of rabbits die, and I have been told that even the birds drop dead from the trees and that their bodies line both sides of the fences.

At intervals the whole continent suffers from terrible dryness. Every state except Tasmania has its drought history. The Riverina country of New South Wales is one of the best of the sheep-raising districts. It produces some of the finest wool and is noted for its excellent grass,

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yet in times of severe drought it looks as though a fire had swept over it. Most of it is then as bare as a baseball diamond. There is not a green sprout or any sign of vegetable life to be seen. In one drought prevailing in parts of Queensland there were tracts strewn with dead sheep, cattle, and horses, and in some districts more than half the sheep were lost. At another time the wool clip of Australia was reduced almost twelve per cent. and the number of lambs born was cut down enormously.

Ten of the thirteen big droughts recorded since 1880 affected principally interior regions where the rainfall is normally less then twenty-five inches; but almost the whole continent suffered in the great drought of 1902–1903. Imagine what it would be like if all the United States from New York to San Francisco had no rain, and there was no green except on the mountains and in parts of New England. Then you will have some idea of conditions in Australia during this visitation.

The great drought was the culmination of five unfavourable seasons. Fifteen million sheep and one and a half million cattle died in a single year, while in the whole period sixty million sheep and four million cattle perished of thirst and starvation. Wheat production fell off to less than one third of the normal. For lack of water mining operations were checked. Many people left the country, the birth rate decreased, and the death rate rose.

There was another general drought in 1919–1920, which was severe but not so bad as the one of 1902. Besides, by that time the people had learned more about irrigation and storing up fodder for grassless winters.

The first irrigation enterprise in the country was undertaken by two brothers named Chaffey, who had had ex-

perience in dry farming in California. They secured from the government of Victoria a big grant of land, which was then described as a "howling wilderness of spinnifex and mallee scrub," and irrigated it from the Murray River. It has been little more than a generation since then. Where once was that wilderness there are now twelve thousand acres of irrigated land supporting a population of six thousand people.

Other areas in northern Victoria, where streams are not available and artesian water is unfit for household and stock use, are irrigated by what is called the Wimmera-Mallee system. The state government has built storage basins in the mountains of the Wimmera River region from which small surface ditches are run down the slopes, sometimes for a distance of two hundred miles. excavating basins and throwing dams across natural depressions, three reservoirs have been built holding fifty billion cubic yards of water. These tanks are filled once or twice a year. In some cases the government permits a limited use of this water for irrigation, but generally most of it goes to supply live stock and households. Victoria rents water at an unusually low price, the rate being from one dollar and twenty cents to one dollar and forty-four cents an acre foot.

Three fourths of the irrigated lands of Australia lie along the Murray and its tributaries, and the most important of the irrigation projects is a scheme for impounding the waters of this river. Backed by the Commonwealth treasury, the state governments of New South Wales, Victoria, and South Australia share the expense. Just below Albury on the boundary between New South Wales and Victoria they are building a dam to store one



Mildura is the centre of a fine fruit district, which a generation ago was a wilderness given over to rabbits. The success of this irrigation project started Australia on her policy of reclaiming arid lands.



Victoria is fast clearing the scrub once infesting more than one fourth of the state. After the growth is levelled and dried, it is burned off, cultivated with stump-jump ploughs, and sown in wheat.



Cattle are often saved by driving them from a drought area to a region where pasturage is available. The government maintains stock routes so laid out as to take in all possible water holes and streams.



In parts of Australia much of the rainfall of a year may come in one violent downpour. The rainwater is caught in basins, or "tanks," dug in depressions and lined with cement.

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million acre feet of water, and another of half a million acre feet. In South Australia another reservoir will hold five hundred thousand acre feet. It is estimated that when completed these reservoirs will irrigate twelve million acres of land, or an area more than twice the size of the whole state of New Jersey.

Victoria has, besides, some twenty irrigation projects of her own, the most important being the one in the Goulburn Valley, which serves nearly nine hundred thousand acres, or an area greater than that of the state of Rhode Island. New South Wales's principal scheme is the Murrumbidgee River project, which, when completed, will water two hundred thousand acres.

For the Murrumbidgee scheme the government first bought a tract of about three hundred and fifty thousand acres. Then it started construction of the Burrinjuck Reservoir, a lake forty-one miles long formed by damming the river. The state surveyed the land, fixed routes for highways and the railroad, put in a tree nursery, established an experimental farm, made brick for houses, cut up the land into farm blocks, and got a planning expert from America to lay out the smaller towns and the two future cities of Leeton and Griffin. After twenty million dollars had been spent in this preparatory work the land was opened to settlers.

Leeton and Griffin are now model cities. Each has a civic centre, broad straight streets for business, and pretty winding streets for residences, with a playground for children in every block. The factory districts are segregated and have railroad sidings so that transfers of freight may be easily effected. Butter, cheese, and bacon factories and fruit canneries have been erected and have done well.

It was a bright day in Australia's farming history when its supply of underground water was discovered. Its Great Artesian Basin is the largest known. It is bigger than the state of Texas, taking in a large part of Queensland, ninety thousand square miles of South Australia, almost as much of New South Wales, and twenty thousand square miles of the Northern Territory. In this vast area there is little or no surface water, but under it lie lakes and streams, which supply many gushing wells. Two of Queensland's wells flow two million gallons of water every day, while sixteen of them have a daily outflow of more than one and a half million gallons. Some are very deep. The well at Winton was sunk four thousand feet before water was struck, and in many the water has come from a depth of more than half a mile. In New South Wales a large number of bores have been drilled, and in South Australia artesian wells are multiplying rapidly.

The water from the deep wells is often hot enough to scald a dog to death. It is slightly salt and contains some soda, but generally the sheep thrive upon it. In some cases, however, it is too full of mineral matter for the stock and can be used only for irrigation.

The water from the wells is run to the pastures in pipes and ditches. The ditches are made with huge ploughs constructed of logs in the form of a V, the end shod with iron. A team of eight or ten oxen drags the plough along the course desired for the stream. This makes a broad furrow, forming a canal at which the stock can drink. There are many canals of this kind from fifteen to twenty miles long. One of the best features about artesian water is the fact that droughts do not affect the supply.

In some of the dry areas where there are no streams for

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irrigation and where artesian water is not to be had or is not usable for either stock or irrigation, catchment basins and reservoirs have been built to conserve rain water. Sometimes these are dug down below the surface of the ground and roofed over to prevent loss by evaporation. In places skeleton buildings with large roof areas are set up to catch the rain.

Moreover, the Australians are learning the lessons of dry farming and of laying up supplies against unfavourable seasons. Many of the stockmen, especially those with small holdings, pack away grass in pits dug in the ground. Salt is mixed in with the fodder to prevent its fermentation and the whole mass is covered with earth to exclude the air. Treated in this way, the food will keep for years, and insure against loss of stock by starvation in a dry season. Nevertheless, the settler is not safe in starting to raise sheep or cattle unless he has enough capital to tide him over the lean years that are sure to come.

As a rule, the dry spells affect different parts of the country at different times. Hence the stock can be saved by being driven from stricken areas to places where the pasturage is good. The dreaded droughts as well as the need of feeders to the railroads account for the stock routes that form a network over the whole country.

In Australia, as in all countries, the cattle regions are in wide, unsettled areas. The cattleman has his herds "'way out back" in the "Never-Never Land" where they roam over unfenced tracts of vast extent. In the Northern Territory the average pastoral holding is two hundred and seventy-five thousand acres. The great events of the year are the "musters" of the "mobs" of cattle, when the stock is counted, sorted, branded, and selected for marketing.

Sometimes the trip to the nearest port or railroad will take as long as five months. The law demands that the cattle roads be kept open and that the stock be allowed to feed on a half-mile stretch on each side of the route as they pass along. It also requires that the cattle move at least six miles a day.

In poor seasons, when water and forage are particularly scarce, hundreds of cattle may die of thirst or starvation on the way. Therefore the stock routes are laid out by the governments to take advantage of every known source of water. Streams, springs, water holes, and stagnant pools are marked out, for in the arid regions the stock will drink about any liquid they can get. Wells are dug and tanks for catching what rain may fall are constructed. New South Wales has seven hundred of these public watering places, which are under government supervision. South Australia's stock routes extend from Port Augusta to the borders of Queensland and Western Australia, and up into the northwest desert for seven hundred miles. Western Australia looks after two thousand miles of stock routes leading from inland stations to the cities on the southwest coast.

One of the most marvellous things about Australia is her quick recovery from a drought. Within a week after a rain plains that have been reduced to dust, without a vestige of any growth for miles and miles, are covered with green and in a short time furnish luxuriant pasturage. The drought never kills the seeds of native grasses in the ground. Three years after the drought of 1902, New South Wales, which had lost seventeen million sheep, had increased her flocks from twenty-three million head to forty million and the number of her cattle and horses had



No Australian would think of going through a day without tea. Cattle men, sheep herders, bullock drivers, and even the "sundowner" carry it with them and "boil the billy" over camp fires



Unlike its rival, Sydney, Melbourne grew according to plan. Collins Street, the main thoroughfare, and the other principal streets were laid out a mile long, 99 feet wide, and in checker-board patterns.

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doubled. By 1905 the number of sheep and cattle in the whole Commonwealth exceeded the figures for 1900.

The Australians cannot be beaten for enthusiastic faith in their country, and some of them go so far as to tell me that droughts are a good thing. They say the soil must rest occasionally and that dry seasons, like ice and snow in cold countries, are simply Nature's methods of forcing the lands to lie fallow.

CHAPTER XII

MELBOURNE

T WOULD surprise many Americans who think theirs is the only real country on earth to come down to Australia. Take the city of Melbourne. It is not so old as Chicago, and it is younger than any town of its size in the United States. In 1837, when Chicago was incorporated, Melbourne contained five wooden shacks and eight turf huts. To-day it is a magnificent city almost as big as Detroit. There is not a country in Europe or a state of the Union but would be proud to own such a capital.

The city lies at the bottom of eastern Australia, on the banks of the River Yarra, near where it empties into the Bay of Port Phillip. One can walk for six miles along the wharves and count forty bridges crossing the Yarra and other streams in the city and suburbs. Steamers of eight thousand tons, drawing twenty-three feet of water, can come right into the town, but larger vessels anchor at Port Melbourne three miles below it.

In a bend of the river and close by the wharves is the million-dollar municipal market house. This is a three-story brick structure housing hundreds of stalls to which Melbourne housewives come to purchase their supplies. A part of the building is given up to storage rooms for butter, rabbits, chickens, and other things awaiting shipment overseas.

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Melbourne is built on a flat plain. It covers many acres and is well laid out on the checkerboard plan. The principal streets are ninety-nine feet in width. The best business blocks and public buildings are on Collins Street, which is the main thoroughfare. St. Kilda's Road, which runs from the centre of the town past the Botanical Gardens and the official residence of the Governor-General of Australia, is one of the finest boulevards in the world. It was built to honour King George V, then Duke of York, when he came out in 1901 to open the first Federal Parliament.

On all sides of the city are attractive suburbs, the most beautiful of which is Toorak, where the rich have their homes. Their handsome residences are set in large gardens and are generally hidden by high walls from the passerby. In the less pretentious suburbs the newcomer is struck by the number of one-story houses. The reason for this, as well as for the growing number of apartment houses in this and other Australian cities, is the difficulty of getting servants.

Although it was decided at the beginning of this century to build the federal capital on a new site, Melbourne has remained for more than twenty years the "temporary" capital of the Commonwealth. When the states were federated there was hot rivalry between Sydney and Melbourne. Neither was willing for the other to become the national capital, so it was provided in the Constitution that a new city should be built, at least one hundred miles from Sydney, and that, pending the erection of the necessary buildings, Melbourne should be the seat of government.

The site for the new capital was donated by the state of New South Wales. It is at Canberra, about two hundred

miles southwest of Sydney. The architects of the world were invited to submit plans for the city, and the prize was won by Walter Burley Griffin, of Chicago.

The World War interfered with the construction of Canberra, and it has also been held back by much opposition to the great outlay of money involved. On his visit to Australia two years after the war was over, the Prince of Wales presided at the laying of the cornerstone of the Parliament buildings. Bridges and roads have been built, sewerage and water-supply systems have been installed, and a meeting place for the Parliament has been provided. Nevertheless, it will be some years yet before the Commonwealth's made-to-order capital is completed.

As the capital of Victoria, Melbourne has the state offices. It has also city buildings and a town hall. These structures cost many millions of dollars. One of them houses the splendid public library containing a quarter of a million books, and under the same roof are the museums of sculpture, technology, and ethnology, and an art gallery. In connection with the art gallery there is a travelling scholarship for art students endowed by the state.

The town hall is a great structure of white freestone on the corner of Collins and Swanston streets in the very heart of the city. It is the home of the mayor and city officials, including the council, and it has also an amusement hall which will seat three thousand, where public entertainments are given at cost prices. For concerts, it has a thirty-five-thousand dollar organ, which, as I have said, was the largest south of the Equator until Sydney bought a bigger one. The city employs an organist to play it twice a week for the entertainment of the people, and any Thursday or Saturday one can drop in and listen to

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the music for an hour or so free of charge. Melbourne not only provides free concerts for its citizens, but reserves one section of its race track to which the public is admitted without having to buy tickets.

The Australians believe that their cities should be run for the benefit of the people and they do not overlook any opportunity to this end. Melbourne owns its tramways and maintains all sorts of public institutions, such as museums, picture galleries, and baths. It has numerous night schools and a working man's college with several thousand students. The city keeps up an aquarium and a good zoölogical garden. It has about six thousand acres set aside for parks and pleasure grounds, and its citizens have many organizations and clubs for outdoor amusement. The Melbourne Cricket Club, which was founded about the time the city was begun, now numbers more than three thousand members. It keeps twenty men busy taking care of its property. Already more than half a million dollars has been spent on the nine-acre cricket ground, which is said to be the finest in the world.

I wish I could take you out to one of the great meetings at Flemington Lawn, the Melbourne race course, which the people here think is the finest on earth. It has an area of about three hundred acres, most of which is covered with a lawn of thick velvety green. There are really two courses, one for steeplechase events and the other for running and hurdle races. The track, grandstands, and stables are all well built and equipped with the latest improvements.

The inside of the ring, which is given up to the people who pay no admission, is usually crowded with workmen and their families. The grandstand, built on a hill at

one side of the course, has the first-class seats, and directly behind it on the hill itself are equally good places, which can be had for lower prices. In any one of these situations the spectator has full view of the race from start to finish and need not lose sight of the horses for the tenth of a second.

I have several times gone out to the races, which are held every Saturday afternoon during the season. They are attended by thousands. Flemington Lawn is a good place to see the people of Melbourne at their best. Everyone goes to the races—business men, public officials, and even the preachers, though I would not say that I saw any of the clergy place any extravagant bets. The crowd in the grandstand has as well-dressed and fine-looking men and women as one can see at any similar show the world over.

People down here have a way of dating events by saying, "Oh, yes, that was the year So-and-So won the Cup." They are referring to the Melbourne Cup Race, the chief sporting event of the South Pacific and one of the greatest of the whole world. Melbourne Cup Day, the first Tuesday in November, is a general holiday, and the city does little or no work during the week of this race. Flemington is crowded with a brilliant throng. Often one hundred and fifty thousand people attend, some coming from points three thousand miles distant. Nearly all bet, the women as well as the men. The bookmaker is in his element, and one hears many stories of crooked methods and thrown races, though how much truth there is in them I do not know. Clerks and shop girls go without lunches for weeks to save money to lay on the favourites. Office boys steal stamps and petty cash, and bank

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clerks are sometimes tempted beyond their strength to speculate with the funds under their hands so as to gamble on the great event.

An attorney general of New South Wales, speaking of the Melbourne Cup and the other races so frequent throughout the Commonwealth, once declared that ". . . nine tenths of the embezzlements and the forgeries and the breaches of trust which come before the Australian courts are directly due to horse-racing and its concomitants."

But editors and preachers, votes in the hands of women, and state and Commonwealth legislation have so far been powerless to stop betting on the races. The gambling spirit pervades all classes of Australians, from the farmer who stakes everything on the freaks of the climate, to the legislator who helps put a radical law on the statute books with the feeling that the chances are even that it will work out all right.

I should say that drinking is quite as much of a national vice of the Australians as gambling. I know of no country where it is more common. In many families it is usual to serve whisky and soda at afternoon teas, the men taking the whisky and the women the tea. Some of the people keep themselves "soaked" a good part of the time. Scotch whisky is the favourite tipple and the customary way of taking it is to mix it with water and sip it. Americans once prided themselves on drinking their whisky "straight," swallowing it down in one gulp, but here the same amount mixed with water lasts for an hour. A great many have whisky with their meals, and treating, or, as they call it here, "shouting," is common. The man who drinks alone is thought to be mean, and in the

smoking rooms of the hotels one sees men sipping and talking together from dinner until bedtime.

There are no saloons here as we know them. To illustrate:

"Is that big building a hotel?" I asked a Melbourne man one afternoon as we were passing one of the finest structures of this city.

"No," was the reply, "I don't think it's a hotel. I think it is a coffee palace. Still, I heard the other day that its owners had bought out the right to sell liquors and so it may be a hotel after all."

"But what is a coffee palace?" I asked.

"A coffee palace," my acquaintance replied, "is where they keep everything that belongs to a proper hotel except the bar. A hotel is a place where liquors are sold; without the liquors it can't be a hotel, and a coffee palace can't sell liquor."

"What do you mean by the owners buying out the right to sell liquor?"

"That is a part of our liquor-option law. Only so many places are licensed, and if a new place wants to start up it has to buy an old license or wait until one is given up. Liquors can be sold only at public houses, or hotels, providing board and lodging. However, it is true that many of the hotels have only one or two bedrooms to rent. They make their money from the bar."

Notwithstanding these restrictions, and the absence of the American type of saloon, I find that bars are even more frequent here than they used to be at home. The man who wants a drink can get it in any block, and if he is an Australian the chances are, nine out of ten, that he wants it.



The race horse is one of the national idols of Australia. Every one, from preacher to porter, goes to the races, nearly all bet, and the attendance at the Melbourne Cup sometimes numbers 150,000 people.



The great white stone town hall contains a room with three thousand seats for public entertainments. The city employs musicians to give free concerts twice a week on its \$35,000 organ.



Until the completion of the made-to-order capital at Canberra, the seat of the Australian federal government, remains at Melbourne, where the Commonwealth House and Senate meet every year.



Alexandra Gardens in the centre of Melbourne remind one somewhat of Boston Common and Central Park. A shack village when Chicago was incorporated, the city is now one of the fine capitals of the world.

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One of the surprising things is the little account taken of drunkenness or drinking. No one seems ashamed of having contracted the habit, and many men refer as non-chalantly to having been drunk as you would to having had your dinner.

Not long ago I was on a train in company with three Australians who were evidently old friends. One of the men said: "You see how much fatter I look. That fat comes from temperance. I have taken on flesh since I stopped drinking. I used to drink five bottles of gin every week right along and often much more. About six months ago I tapered off and at once began to gain weight. Since then I have gained two stone in a month."

The other gentlemen contributed like stories of themselves and their friends. They kept up the conversation until the train stopped at a station, when all went out for a glass of whisky and soda.

To me one of the worst features of the liquor traffic in Melbourne and other Australian cities is the fact that the drinks are dispensed by women. The Melbourne girls are especially beautiful, and the town has the reputation of having the prettiest barmaids of Australia. Some of them are witty and nearly all are charming, so that it is no wonder that the men like to come in for a chat and a drink.

CHAPTER XIII

IN THE MARTS OF THE CITY

ELBOURNE is one of the best business cities of Australia, and to a large extent the money centre of the country. It has a number of rich men, its people are great spenders, and money is kept on the move most of the time. By no means all of it goes for good living. There are numbers of insurance companies, real-estate firms, and banking institutions. The chief banks have branches in the state of Victoria and in all parts of the continent.

Some of the stores are called universal providers, taking the place of our department stores. All have good window displays and they advertise in the spread-eagle American way. One man boasts of having one million books in his stock, and fills the newspapers with rhymed effusions about his goods. His shop is called the Book Arcade, and it is a sort of department store, in which books are featured. It sells also stationery, candy, and pictures, and in it you may get a tooth pulled or a photograph taken while you wait. As in Sydney, many of the big stores are in arcades from one principal street to another which protect the shoppers from the blazing sun in summer.

Among the most interesting shops are those selling jewellery, for they give an idea of the wealth and the tastes of the people. There are quarts of diamonds and pearls displayed in the cases, and the windows are filled with

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rings, brooches, and precious stones. Among the most common of the jewels are Australian opals. They may be seen everywhere. I verily believe I have handled a half bushel of them since I came to the country. They are sold set and unset, and are cheaper than with us, although the better stones bring good prices. An opal the size of a small pea costs three dollars, while for fifteen dollars you can get one full of fire and as big as your sweetheart's thumb nail. Like diamonds, the stones are sold by weight, at so much a carat.

In walking through the business streets I see many curious signs. One reads: "John Jones, Fellmonger." That is a fur store, as I can see from the 'possum, the platypus, and other skins in the window. The shop next door has the word "Draper" above it. That is a dry-goods store, while the sign "Ironmonger" on the building over the way shows that it is a place for selling hardware. In Australia the druggists are called chemists, and a drug store is a chemist shop. Lumber dealers are "timber merchants," and the lumberman is a "timber getter."

Besides what seems to an American their queer use of English, the Australians are even more addicted to slang than we are. Their most common ejaculation is "My word!" You hear this everywhere. It takes the place of "Mon Dieu!" in French, "Ach Gott!" in German, and "Oh, Lord!" in the United States. The Australian evidently thinks his word a better thing to swear by than the name of the Almighty. Among other slang phrases are the words "screw," for salary or income; "narked," for angry; "cush," for comfortable, and "putting on side," for putting on airs. If a man is assaulted by highwaymen

and robbed he is "stuck up," and if he has no money whatever, it is common to say he "has not a bean." "Good iron" is an expression of incredulity at a preposterous story. People ask you to "hang up your horse" instead of hitching it. "To have" a man is to fool him or take him in. If a person fails "he has gone the bung," and if he is well off "he is pretty well on." We use the expressions "on the jump" or "on the go"; the Australian says he is "on the wallaby." When a man acts foolishly we sometimes say "he is off his base"; with the Australian "he is off his pannikin." An Australian girl does not primp, she "tittivates." An Australian dude is a "toff," a tramp is a "swagman," "a humping bluey," or a "sun-downer." Luggage is always called "swag," and the common word for food is "tucker."

As to Melbourne's business hours, the forty-four-hour week prevails generally. Most of the big stores are not open before half-past eight or nine; all except fruit and confectionery shops must close at six, and all are required to shut up for the half holiday every Saturday. Barbers and tobacconists may close half a day on Wednesday, instead of Saturday. Even the drug stores have to close on Saturday afternoons and on Sundays as well.

Melbourne is called the Yankee city of Australia and its people pride themselves on being like us. They are considered the most enterprising of any people south of the Equator. I have been frequently asked if Melbourne did not remind me of home, or whether we have anything better of the same kind in the United States.

Many Americans flocked here during the gold rushes of the early fifties and some of them stayed and bought property. Several of the finest business blocks are owned by

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Americans; for instance, the Equitable Life Insurance Company of New York has one of the best office buildings here. A great many fortunes have been made in Melbourne real estate. The romances of its land speculations are like those of New York and Chicago. The island of Manhattan was bought from the Indians for about a peck of beads, buttons, and trinkets; Chicago could once have been purchased for a pair of old boots. The Australian aborigines traded the site of Melbourne, including six hundred thousand acres surrounding it, for forty pairs of blankets, forty-two tomahawks, and a few knives, scissors, looking glasses, and shirts. The same ground is worth more than one hundred million dollars to-day. John Batman, the man who bought this tract, was not allowed to keep it. His claim was disputed by others, and a few months later the governor of Australia came down from Sydney, laid out the town, and sold off the lots at auction.

That auction made fortunes for the successful bidders. There were about two hundred men present, and nearly all bought city lots of half an acre each. The first sold for \$150 and another for twice that. One block of ten acres netted \$2500. That area is now worth at least \$15,000,000 and the value of many of the other lots has increased in about the same ratio. The net proceeds of the day's sale were less than \$20,000, yet to-day the same land is worth at least \$40,000,000; that is, its value has increased just about two thousandfold, which is certainly a fair profit. The auctioneer was a man named Hoddle, who worked on commission. His fees for the sale were about \$285, and he took them in land. He was awarded two lots in Elizabeth Street, which he lived to see worth

\$1,250,000. That was certainly one occasion when talk was worth money, for Hoddle must have received in the end hundreds of dollars for every time he opened his mouth to cry, "Sold."

This auction took place in 1837. From that time the town grew steadily. Within twelve months a hundred houses were built, and within five years it had six thousand inhabitants. It was incorporated in 1842. Ten years later nuggets of gold as big as your fist were discovered at Ballarat, some hundred miles back in the country, and Melbourne boomed as San Francisco did, and at just about the same time.

Hundreds of thousands of men passed through the city on their way to and from the goldfields, and within ten years more than four hundred million dollars' worth of gold was sent into Melbourne for shipment to Europe. The town doubled and quadrupled in size. It soon reached the rank of a city, and kept growing until about 1890, when it had half a million people.

Then came a panic, which seemed for a time to be the ruin of Australia. But Melbourne was soon on its feet again and I agree with the people here who believe that their city is destined to become even greater as the Commonwealth grows.

CHAPTER XIV

THE STATE-OWNED RAILWAYS

Was painfully reminded of the worst feature of railroading on this continent. At Albury, on the frontier between New South Wales and Victoria, I was routed out of my berth at daylight and compelled to change cars. Although the central government controls the telephone and telegraph services of Australia, the railroads are owned by the states, and since each has a different gauge for its tracks, passengers and goods must often be transferred.

The lines in Queensland, Western Australia, and Tasmania, which are not contiguous states, have a narrow gauge. The tracks in Victoria are five feet three inches in width, as are those of the main lines of South Australia. Only New South Wales and the Transcontinental line built by the Commonwealth government have the world standard gauge of four feet eight and one half inches. In going from Brisbane in Queensland to Perth in Western Australia one must change five times because of differing track widths, and this is one of the reasons why the thirty-five hundred mile journey takes practically six days. Such conditions cost more than time. For example, the transfer charges on freight between New South Wales and Victoria range from thirty to seventy cents a ton. Imagine what it would mean in the United States if

passengers and freight had to be moved from one train to another every time a state line were crossed.

Ever since the states formed the Commonwealth there has been much discussion of the unification of these conflicting railroad gauges. This is certainly one of Australia's greatest needs, but so far the expense has proved prohibitive. A commission of three eminent engineers, an Englishman, an Australian, and an American, recently reported that to convert all the existing lines in the Commonwealth to the standard gauge would cost about two hundred and ninety million dollars. This would mean an expenditure of more than fifty dollars for every man, woman, and child in Australia. It has also been proposed to standardize the chief routes connecting the five state capitals on the mainland at a cost of about ninety million dollars, but just now even this seems more than the country can afford. Yet the diversity of gauges imposes such a burden on Australian business that some day unification will have to come.

At present there are about twenty-six thousand miles of railways on the continent, of which twenty-three thousand miles are owned and operated by the states, twenty-eight hundred are privately owned, and the rest are in the hands of the Commonwealth government. This is about one tenth the mileage of the United States, which has approximately the same area but twenty times as many people. Most of the Australian railroads are, like the bulk of the population, on the eastern side of the continent. The great tropical Northern Territory has only one railroad, which is but two hundred miles long.

In each state the lines are operated by one or more commissioners appointed by the cabinet. The Minister



Australian railroad tracks are laid on ties cut from her forests of eucalyptus. One variety, the iron bark, is practically immune from fire, while the kauri, jarrah, and blue gum last for fifteen or twenty years.



For years the governor of Western Australia in his palace at Perth could communicate with the rest of the Commonwealth only by ship or telegraph. Now the Transcontinental Railway connects his capital with the mainland.



Despite the expense in handling, Australia still ships the bulk of her wheat in bags and on flat cars. Because of the dry climate, it is safe from rain but much is destroyed by rats.

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for Railways directs legislation and answers questions in the state Parliament; but otherwise the commissioners have a free hand. Federal lines are managed by a railway commissioner for the Commonwealth.

In Sydney I asked a member of the New South Wales railroad commission whether he thought government control of the railroads was a good thing. He replied:

"There is no doubt of it. The results have been so good that we are convinced that such management is for the best interests of the people. We are giving a better service at less cost than private roads could do."

"But how about the political end of the machine?" I asked. "Do not the politicians try to manage the commissioners and control the vote of your employees?"

"No," was the reply. "Our laws provide that we shall be absolutely free. The government does not dictate to the chief commissioner and his three assistants. We have our own staff of officials, whom we appoint, and no promotion can be made without our consent. We have about forty thousand employees in this state alone and we are careful to do them justice. We hold a court every other Wednesday, to which our men can appeal if they have grievances. There are many such appeals and about one third of them are settled in favour of the men."

"How about wages and hours of work?"

"We have the eight-hour day and we pay higher wages than do the European railways. Our men are better treated than those of any railroad I know. They are under the civil service and no man can be removed except for cause."

"How about the profits? Do your railroads pay?" I asked.

"Yes, we usually manage to show a small surplus after meeting interest charges on the capital invested. But our revenue fluctuates from year to year, according to whether there is a good or a poor season for farming and sheep raising. In unfavourable seasons the carriage of fodder and the transfer of stock to better pastures at reduced rates mean smaller earnings and larger operating expenses. Extensions into thinly settled districts also cut down the net income, since several of these lines earn little more than the cost of maintaining them. Nevertheless, we are pushing out roads into the good territory, knowing that settlement will soon follow and that the new lines will ultimately become profitable."

Another prominent official with whom I talked on this subject is a Queensland railroad man. Said he:

"As far as I can see, the government control of our rail-ways has been an excellent thing for the state. It has given us profitable railways which could never have been built by private parties. Take our Rockhampton line, for instance. It begins at the coast and runs four hundred miles westward through a thinly populated country. When it was first completed there were places on that line where one could ride one hundred miles without seeing a town. But the railroad made the land on both sides of the track available for sheep raising. It is now taken up for pastures, and there are hundreds of flocks feeding upon it. Towns have sprung up along the line, and in time the road will pay well."

"How about the profits on the Queensland roads?" said I.

"If there are any, they are never large," was the reply, you see we don't want a big profit, for it is our principle

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to keep the rates for freight and passengers as low as we can. As the lines make more money we shall lower the rates and increase wages."

"Are you satisfied with the narrow gauge?" I asked.

"Yes. It pays us better than the broad gauge. Our roads cost only about half as much per mile to build as those of New South Wales and they furnish all the transportation required."

"Where do you get your equipment?" I asked.

"We used to buy most of our rolling stock from England, but now, as in the other Australian states, our locomotives and cars are built at the state railway shops. Our shops are at Ipswich, which is close to big coal deposits. We buy steel rails from the steel mills at Newcastle, and about the only equipment we now get from abroad are patented devices and specialties."

I may add that not all those to whom I have talked are so favourable in their reports on the state-owned railways. One man reminded me that in most cases these lines, operated in the interests of the people, charge as high freight and passenger rates as do our privately owned roads in the States. Another calls attention to the fact that sometimes for four years running the Australian lines have shown considerable losses and capital is by no means always certain of the four per cent. dividend it has a right to expect from them.

One thing that strikes one about the Australian locomotives and passenger and freight cars is the fact that they are much lighter than those to which we are accustomed. The freight cars seem particularly small and light. In my trips over the country I have passed hundreds of slat-sided cars transporting livestock. The sheep

cars are double-deckers. The Australian wheat goes to market in open-top cars, instead of in box cars, as with us, and is handled in sacks instead of in bulk. The wheat export amounts to one hundred million bushels a year, and most of it is shipped overseas in bags. I have seen enormous stacks of full wheat bags along the railways and at the ports. As the grain is harvested in the dry season, there is no danger of its fermentation when bagged and stacked in this way. Neither is there much risk of its getting wet, for it is often covered with tarpaulin, both in the stacks awaiting shipment and on the cars. There is, however, considerable loss every year from rats and other vermin. Since she got her grain elevators at Sydney, New South Wales has been building special grain cars for handling wheat in bulk.

The ties for Australia's railroads are furnished by her eucalyptus forests, many of which contain splendid timber. The Tasmanian blue gum, a species of eucalyptus, is one of the most durable of woods. It has twice the strength of English oak and, used as railroad ties or paving blocks, in the Tasmanian climate it has a life of from fifteen to twenty years. In the dry air of Victoria blue gum sleepers last twice as long. The jarrah, a eucalyptus of Western Australia, has been known to withstand fire better than iron girders. This wood is one of the few that will resist the white ants, and seaborers make no impression upon it. I have heard that jarrah piles driven at Port Adelaide in 1868 showed no signs of decay fortytwo years later. Karri is another remarkably durable eucalyptus of Western Australia much used for ties. Karri planks from ships dismantled after thirty years of service have been sawed up to make paving blocks, and a

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log of this wood that had lain forty-six years in mud below high-water mark was reported "perfectly sound" by a government expert.

One of the biggest railroad undertakings of modern times was building the Australian Transcontinental line for a thousand miles across the desert. Until this was completed Western Australia was cut off from her sister states by a great waste of sand and could communicate with them only by telegraph or by sea. The ocean journey from Perth to Sydney took seven days. Neither Western Australia nor her neighbour, South Australia, felt able to finance an unprofitable railroad joining them together. So it became the job of the Commonwealth government, which began the line in 1912 and completed it five years later.

The overland journey from Adelaide, South Australia, to Perth on the coast of Western Australia used to take two months. By train it now takes two days. Besides decreasing the time between Western Australia and New Zealand or America, the railroad shortens the trip from London to Melbourne or Sydney by almost a week.

Preparing the road-bed and laying the track across the level stretches of the desert were easy matters. The real problem was providing water and supplies for the two construction gangs as they worked toward each other across the hot and arid wastes, unwatered and uninhabited save by hordes of flies and mosquitoes. Four hundred and twenty-five miles west of Port Augusta the railroad enters the Nullarbor Plain, a vast empty limestone plateau on which there is not a single water hole. Here it runs in a bee line for three hundred and thirty miles—the longest straight stretch of track in the world. The

rest of the route is through sandhill country where there are at intervals natural rock catchment basins for water. Although this region is called a desert, there is an annual rainfall of from two to five inches, and this was caught in great roofed-over reservoirs and saved for the use of the workers.

For some time the question of water supply on the Null-arbor Plain threatened to hold up indefinitely the construction of the Transcontinental. Then a message came from Kalgoorlie telling the good news that water had been found on, or rather under, the plain. The engineer in charge wired that he had pumped out seventy thousand gallons from an artesian bore about three hundred miles east of Kalgoorlie. Another bore, one hundred miles farther east, struck brackish water usable for locomotives. These two wells now furnish water sufficient not only for the railroad but for limited irrigation and pastoral purposes besides. There are tanks every fifty miles across the plain, connected by a pipe line from the Kalgoorlie reservoir.

While the Transcontinental was being built, and before the pipe and the tanks were constructed, water for two hundred horses, three hundred camels, and twelve hundred workmen had to be brought by cars and on camelback. At one time it was carried three hundred miles by tank cars and thirty miles by camels to the eastern end of steel at a cost of thirty-nine dollars for each thousand gallons. To supply the western railhead, water was piped for three hundred and fifty miles to a big reservoir and then hauled two hundred and twenty miles to the construction camps.

Without the aid of camels it is probable that the Trans-

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continental never could have been built. The "ships of the desert" took the engineers on the preliminary survey of the line, they bore the men who went along the route looking for wells and water holes, and later on they were the indispensable carriers of water and construction materials over miles of waste land and through months of overpowering heat.

Every effort was made to provide endurable conditions for those who worked on the railroad. The chief engineer and his staff lived on camp trains specially designed for desert use. The trains consisted of seven or eight coaches built with double roofs to give protection from the sun. All the openings were screened against the swarms of flies, mosquitoes, and other insects. There were, besides, a car for stores, a well-equipped hospital car, and cars with living and sleeping quarters for the staff.

The workmen lived in small light huts of canvas and wood, which could be knocked down and moved, as they had to be about every three days. Like the cars, each of the huts used for sleeping quarters had an extra roof. The heat was often so intense that at midday it was sometimes impossible to work, for rails, sleepers, and everything else were too hot to touch. The thermometer frequently registered one hundred and thirty degrees in the shade.

Supplies of clothing and food were brought up from the warehouses at the eastern and western terminals of the road on what were known as "tea and sugar" trains. The men were well fed and their daily menus included not only bread and meat, but even fresh fruit and vegetables.

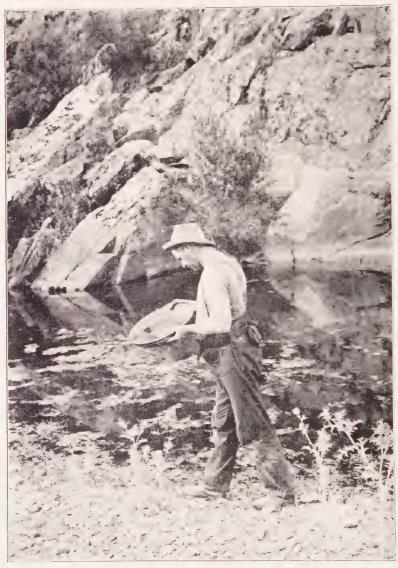
It cost thirty million dollars to build the Transcon-

tinental, but this sum is not considered unduly great in view of the obstacles overcome. Except for the money spent in supplying water, the expenses were not large. In no part of the route does the track cross a river or climb a steep grade. Comparatively few common labourers were required. Construction was simply a matter of making an even bed for the sleepers, then placing the rails with a track-layer, and bolting and spiking them down. The road moved forward at the rate of a mile a day.

The World War slowed up the work, for many of the construction force enlisted. Nevertheless, at the end of five years eastern and western railheads met, and to-day it is possible to go by train from Perth to Brisbane on a route joining all the capitals of the five mainland states. The Transcontinental may, perhaps, never pay in pounds, shillings, and pence. In time saved, however, it has already proved itself invaluable and, what is more important, it serves to bind all parts of the Commonwealth more closely together.



Discovery of Australia's artesian water has led to the reclamation of millions of her acres. Artesian bores spouting thousands of gallons solved the water problem in laying the Transcontinental across the desert.



Though the great gold diggings of Ballarat are worked out, thousands of prospectors are still panning the stream beds of Victoria, hoping for one more great strike like those of the gold-fever days.

CHAPTER XV

GOLD DIGGINGS IN CREEK AND DESERT

AM in Ballarat, the heart of what was once the chief mining district of this golden continent. Within a stone's throw of me was found a lump of gold as big as a watermelon and from under the hotel where I stay fortunes in gold have been taken. Every bit of earth in sight has been run through a sieve again and again to wash out the precious dust it contained, and for miles about the valley of Yarrowee Creek has been honeycombed with diggings. It is even said that the water in some of the deepest mines contains gold. One story is told of how several barrels of water from here were hermetically sealed and sent off to Paris. They were kept there for years, and when opened were discovered to have precipitated several gold nuggets. I doubt the truth of this story!

Gold was known to exist in Australia long before 1851, when Hargraves, an Australian who had prospected in California, discovered it in paying quantities. Hargraves had gone to California in the gold rush of '48 and had failed, but he was haunted by the idea that the gold country in California resembled a certain valley in the hills of New South Wales. This valley was that in which Ballarat lies. He decided to go back home and prospect. He did so and his discoveries threw all Australia into a fever. In a short time it was proved that every creek within a radius of seventy miles from here had gold in its

sands, and in the placer mines opened at Ballarat gold was found in great lumps.

One of the first big nuggets weighed one hundred and one pounds, while the "Welcome" nugget weighed as much as a good-sized man, tipping the scales at one hundred and eighty-four pounds and nine ounces. I have seen models of the nuggets in the mining museums of Queensland, of New South Wales, and of Victoria, as well as in the different state mining schools. The "Welcome" nugget, which was the size of a big baby, was twenty inches long, twelve inches wide, and seven inches thick. It was sold in Melbourne for fifty thousand dollars. In 1858 a lump of gold worth twenty thousand dollars was found in New South Wales, and fourteen years later a mass of gold and quartz weighing six hundred and thirty-nine pounds was discovered at Hills End in the same state. An offer of one hundred and sixty-five thousand dollars for it was refused.

Some of the most remarkable mines of Victoria were at Bendigo, about a hundred miles from Melbourne, where in the height of their production the goldfields yielded more than a million dollars a year. The mines at Ballarat are now worked out, but quartz mining is still carried on at Bendigo Amalgamated, a consolidation of the mines in that region. The average yield is about one hundred and sixty-five thousand ounces a year. Since 1851 the mines of Victoria have produced upward of one and a half billion dollars' worth of gold.

The Ballarat of to-day is not like the Ballarat of the great gold rush. Then it was a city of tents, which probably housed more people than the present population of twenty thousand. Now it is a well-built town, with many comfortable homes, and streets as wide and as well

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paved as those of Washington. The principal thoroughfare is lined with marble statues, and there are others scattered throughout the long park in the suburbs.

Ballarat has good stores and banks, and even a stock exchange, but there is not a mine-shaft house in sight. The people are especially proud of their theatre seating three thousand, an art gallery containing some fairly good paintings, and a mechanics' institute with a library of twenty-two thousand volumes. It, has four other free libraries, good public schools, and churches of every Christian denomination under the sun. It has flour mills, woollen mills, and iron factories. The town has become the commercial centre of a rich pastoral and agricultural region. It is seventy-five miles from Melbourne by rail, and on the main road from Melbourne to Adelaide.

The mining school at Ballarat is, I venture, as well equipped as any similar institution in the United States. I had letters to its superintendent from the director of the mint at Melbourne, and its president kindly showed me through. The college is built over a gold mine which it operates to give practical training to the students. The boys go down into the shafts and work the mine, thus learning by actual experience how gold is taken out of the earth. Connected with the school are all sorts of reduction works run by the students, including cyanide plants, a chlorination plant, and facilities for all the various methods of treating ore. There are large chemical laboratories, assay furnaces, and, in short, everything needed for such a college.

To-day Victoria and Western Australia are the leading gold-producing states of the Commonwealth. I have talked with miners from Western Australia, who tell me

that much of the vast territory has not been touched. Said one mining expert:

"The gold we know of extends over an area of more than six hundred thousand square miles. You can take dirt from the road at any point along a thousand miles, wash it, and find colour."

Kimberley, where gold was discovered in the eighties, was the first of the Western Australia fields, and it proved a disappointment. The prospectors there were working along dispiritedly when in 1802 a man rode into the town of Southern Cross with great news. He brought with him ten thousand dollars' worth of nuggets and dust picked up in two days in a desert region that the aborigines called "Goldarda." There are still old-timers to tell of the scenes that followed. In two hours the price of a horse rose from ten dollars to two hundred and fifty dollars. Camels could not be had. Dogs, cows, and goats were at a premium. So was anything on wheels, from buggies to baby carriages. Some men set off with wheelbarrows. In a day or two Southern Cross was practically deserted. and its inhabitants were trekking across the hundred and twenty-five miles of desert that lay between them and the new strike at Coolgardie. They did not even know the location of the water holes along the route. Many were two or three weeks on the way and arrived with tongues swollen and lips cracked and blackened from thirst.

In a few weeks the news brought men from all parts of Australia; in a few months it attracted them from all parts of the world. Capital became interested. The Wealth of Nations mine at Coolgardie, from which three great nuggets were taken at once, but which later proved



In parts of Western Australia, where water cannot be had, gold is dryblown. The soil is first sifted for nuggets and then the metal is separated from lighter waste by means of bellows.



More than ten thousand camels are used in the dry back blocks, especially in the mining districts of Western Australia. Sometimes it may cost five dollars or more to give one a real drink.

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only a low-grade mine, was discovered by an Indian camel driver who was paid two dollars and a half for his find. The owners of the camel took out more than a hundred thousand dollars' worth of gold and then sold the mine for seven hundred thousand dollars. The original Coolgardie claim yielded more than two and a half million dollars in its first ten years.

In 1893, when the Coolgardie claims were giving out, a grocer of Adelaide formed a syndicate of fifteen people with a capital of less than a thousand dollars. The prospectors they sent out turned up the riches of the famous Golden Mile of Kalgoorlie. Five years later, when the syndicate was disbanded, it voted its original capital as a bonus to its secretary. The value of the shares, based on its holdings at the Golden Mile, was then more than thirty-six million dollars. At that date the syndicate had produced seventeen tons of gold. The money distributed to the Adelaide shareholders was close to five millions in cash, besides upward of seventeen millions in stock.

The great handicap in the Kalgoorlie, Coolgardie, and other desert mines was lack of water, which then cost about as much as gasoline does now. In the Coolgardie fields water brought as much as twenty-five and fifty cents a gallon, and there was a regular business of evaporating and condensing salt water from the lakes and wells to make it fit to drink.

It was impossible to get enough to wash out the gold, which had to be dry-blown. That is, the soil spaded from shallow trenches was first sifted for nuggets, then thrown into the wind and expertly caught in iron pans. It was tossed up again and again to get rid of the lighter waste. Later on bellows worked by hand or foot power were used,

and still later fanning mills were introduced. I am told that in those early "roaring nineties" one could see above the mining camps in the desert a red cloud of dust. This "hell cloud," as it was called, hid the miners from view, and out of it came the sound of laughter and curses, and the roar of the gravel raining into thousands of iron pans.

Although at that time the whole of Western Australia had only about as many people to pay its taxes as Des Moines has now, the government did a great deal to help get water for the miners. In the Coolgardie district it built a number of tanks, bored artesian wells, and installed condensers. Kalgoorlie now has a reservoir with a capacity of five million gallons. It is fed by a stream through a steel pipe as big around as a barrel and three hundred and fifty miles long. The water comes from a point near Perth and is lifted by a series of pumps to a height of about thirteen hundred feet. The Western Australia government sells it at an average rate of seventy-five cents a thousand gallons; in the early days water used to cost sixteen times as much. Without this pipe line Australia's best gold mines would have to be abandoned, and the cities of Coolgardie, Kalgoorlie, and Boulder would sink back into a forlorn desert. Nowadays, as one of the old prospectors put it, "Water? They waste it! At Kalgoorlie, they even bathe in it, at twenty-five cents a head!"

In developing Western Australia's mineral wealth, camels have proved almost as invaluable as water. They had been introduced into the country in the early days and multiplied faster than in their native Arabia. Along with them came their nomadic or Bedouin drivers, who found Australian wages to their liking and stayed on, although in many cases their jobs have now been taken by white men.

GOLD DIGGINGS IN CREEK AND DESERT

It is estimated that more than twelve thousand camels are worked in the dry back blocks of the continent. The ungainly beasts stalk back and forth between the railway terminals of the east and the dry lands of the west. From the silver-mining centre at Broken Hill in western New South Wales they start out for the northwestern part of the state and for interior South Australia, Queensland, and the Northern Territory. From "The Hill" they take supplies to the remote sheep stations, returning with wool. Three hundred and fifty camels are worked by the water-supply branch of the Western Australian government. They serve the gold prospectors and the settlers of the "Never-Never Land," and they are the police and mail carriers of the desert blocks.

In the desert gold-mining camps a considerable expense of doing business is watering the camels. A camel ordinarily drinks seven or eight gallons, when thirsty he will take in twenty gallons, and after several days without water forty gallons are hardly enough to fill him up. Where water is scarce it may cost his owner two or three dollars to treat his mount to a drink; one camel just in from a long trip drank fourteen dollars' worth before he was satisfied.

But before I leave the subject of gold mining in Australia let me tell you of the visit I made to the mint at Melbourne where for many years gold dust and bullion have been turned into sovereigns. The gold comes from different sections of Australia and after being coined is shipped off to London. The greater part of the metal goes into sovereigns and half sovereigns.

I went through this money mill with its director. We first watched the gold as it came in. Some of it was dust, but much was in the form of bullion bricks from the

smelters. As it was handed over the counter the clerks weighed it, using scales so fine that they can weigh accurately a golden grain as small as the point of a pin or a great nugget the size of my head. After the gold has been weighed a memorandum of the amount is made for the depositor, which he presents at the cashier's office to get his money.

Leaving this room we went on to see how the smelting was done. The gold is melted in crucibles or pots of fine clay and plumbago. Each pot has a capacity of perhaps half a gallon of liquid gold. It is fitted into a little furnace not unlike the forge of a country blacksmith, set in a long, narrow ledge on one side of the melting room. In the room we entered there were twenty of such furnaces, nearly all of them filled with gold. The fuel used is coke, and a strong draught makes such a heat that the metal bubbles like boiling water. I was dazzled when I looked into the pots. The liquid was emerald rather than gold. I saw it poured out into moulds and the stream was a current of beautiful molten green on a background of light yellow. Later, when the moulds were opened, the green had disappeared and the metal had become a bright golden yellow.

I next watched the bars of bullion being rolled into the strips from which the gold coins are cut. Each was a ruler of gold twenty-five inches long, two inches wide, and not quite half an inch thick. I followed a truck load of these bars as they were wheeled into the rolling room. Here they were pressed between great steel rollers, which made them longer and thinner. At the finish each bar had become fourteen feet long and was just the thickness of a sovereign. Moreover, the pressing had polished it so that it shone like a new wedding ring. I noticed that the work-



Once treated with scant consideration, the shearers who now have one of the strongest unions in the country are veritable autocrats about their hours, wages, and quarters. Every afternoon they knock off for tea and a smoke.



Like 600,000 other Australians, these leather workers are union men with good wages, fair hours, and a weekly half holiday. Forty-eight hours is the weekly maximum, though in some trades as little as thirty-six hours count as full time.



The agriculturist feels keenly the need for more people on the land, but he stands with the trade unions in opposition to letting in swarms of coloured labour from the over-populated Orient.

GOLD DIGGINGS IN CREEK AND DESERT

men wore thick gloves, and was told that this was because the strips of metal get hot as they are rolled.

The next process is making the blanks. This is done by steel punches which cut the metal into disks much as a cook cuts the dough in making biscuits. I stood beside this machine and heard it chop, chop, chop, as it punched out sovereigns at the rate of ninety to the minute, twenty-seven thousand dollars per hour.

Each blank is weighed to see that it has exactly the right weight of gold for a sovereign, and is then run through a coining press which stamps the image of the king upon it and at the same time mills the edges. All of this work is done with cold steel pressing upon the cold gold. The only heat after the melting is that which comes from the pressure caused by the enormous weight on the metal.

I have no doubt that Australia will be turning virgin gold into sovereigns for years and years to come, but its production of the precious metal is on the wane. The mines of Kalgoorlie are still paying, but those of Coolgardie are worked out. The annual production for the whole country is now only half that of Victoria in its best days, and is considerably below the best year's output in Queensland and Western Australia. It may be, though, that more Golden Miles lie hidden under the vast unprospected areas of the continent.

CHAPTER XVI

A WHITE WORKERS' CONTINENT

That is how these people speak of Australia. They have tried to make it the paradise of the labourer, and are determined to keep out all members of the coloured races—black, brown, or yellow—who might wish to share it with them. All sorts of schemes have been devised for the benefit of the wage-workers, most of them intended, as far as I can see, to help them sell the least work for the most money.

Australia is the land of the labour union. No other country is so thoroughly unionized, and nowhere else does organized labour go so far toward running both the government and business. There are unions of sheep shearers and factory workers; unions of rabbit trappers and harness makers; there are unions for occupations I hardly knew existed. Six hundred thousand people, or one out of every nine of the population, belong to labour unions of one kind or another.

This continent is also the home of the eight-hour day. It was established in Australia and New Zealand long before workers in other countries even began to demand it. Australians are so proud of this fact that they have put up a monument to remind posterity how its work day was shortened. I have seen most of the great monuments of the world; I have lived in the shadow of our own huge

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shaft in honour of George Washington, climbed the Pyramid of Cheops in Egypt, and beheld the splendour of the Taj Mahal in India. But never before have I seen anything like this monument in Melbourne, commemorating a victory for labour in its centuries of struggle with capital. It would never be noticed for its size or beauty, for it is merely a simple shaft of stone. Its significance comes from the three huge figure "8's" at its top. These represent the slogan of Australian workmen of more than a generation ago—"eight hours' work, eight hours' play, and eight hours' rest." The "Three Eights" monument, as it is called, gives the key to the story of the hours of labour in Australia to-day, and the spirit which still seems to rule the people.

The agitation for the shorter working day began in Australia nearly seventy years ago, shortly after the gold fever first struck the country. Many of those who had come out to make their fortunes in nuggets found only disappointment, and had to look for other work. Most of these men drifted to Melbourne and Sydney, where they soon organized trade unions like those to which they had belonged in England. The workers in the building trades in New South Wales were the first to get their eight-hour day. In a comparatively short time it was generally adopted in all the states, and now forty-eight hours is the recognized maximum for a week's work throughout Australia, although in some trades forty-four, forty-two, and even thirty-six hours are considered full time.

Recently there was a move in the Federal Parliament to legislate a forty-four-hour week throughout the Commonwealth, but the members of the Labour Party were not quite strong enough to carry the measure. The forty-four-

hour week now generally prevails in Queensland, where the Labour Party is firmly in the saddle and rides all kinds of socialistic hobbies. The rallying cry is: "Cheap bread, cheap beef, and high wages." In the attempt to realize the first two of these ideals the state runs twenty-two cattle ranches and fifty butcher shops. It catches fish and sells them at retail, operates a meat-packing plant, and has a big produce business selling direct to the consumer without the intervention of the middleman. It even runs a hotel of its own. Wages and hours are regulated by the government, which also owns and operates the railroads, the saw-mills, and the mines. There is a government savings bank with deposits of seventy millions of dollars from a population of seven hundred thousand. The state competes with private insurance companies and has lowered rates by twenty-five per cent.

When the labour unions began their campaign for shorter hours, workers in the goldfields were making such big pay that the general wage level was high, and the men were then satisfied with their earnings. Later the original slogan was enlarged until the "four sacred eights" of Australian labour were: "eight hours of work, eight hours of play, eight hours of rest, and eight bob a day." But after a while, eight shillings, or two dollars, did not look so fair to the workers as the "living wage," and so they began to go after that. How well they have succeeded may be gathered from the definition of a living wage as laid down by the New South Wales Court of Industrial Arbitration. It reads:

The living wage is standardized as the wage which still does neither more nor less than enable a worker of the class to which the lowest wage would be awarded to maintain himself, his wife, and two children

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—the average dependent family—in a house of three rooms and a kitchen, with food, plain and inexpensive, but quite sufficient in quantity and quality to maintain health and efficiency, and with allowance for the following other expenses: Fuel, clothes, boots, furniture, utensils, taxes, life insurance, savings, accident or benefit society, loss of employment, union contributions, books and newspapers, train and tram fares, sewing machine, mangle, school requisites, amusements and holiday, intoxicating liquors, tobacco, sickness and death, domestic help, unusual contingencies, religion or charity.

It is such a standard of living that the Australian labour unions are determined to maintain for the workers. So far they have been able not only to enforce most of their demands, but to have many of them written into the laws. Factories, shops, and stores are subject to all sorts of restrictions, and seem to be run quite as much in the interests of the workers in them as for their owners.

Each union has rigid rules and regulations governing the employment of its members, and generally they are upheld by the state courts for the arbitration of industrial disputes. In New South Wales, for example, the law gives preference to union men in employment. In one instance, an employer wanted a workman. Two men applied, one a unionist. But the employer chose the non-union man, believing him more competent for the job. For this the Arbitration Court fined him ten dollars, and he had to pay costs of as much more. The judge informed him that the court, and not the employer, must decide as to the competency of employees.

In another case some dock workers had made demands which a steamship company would not meet. The men did not strike, but, just when their work was most urgently needed, went on a picnic. To avoid such interruptions the company proposed to pay men to work by the week

instead of by the day and offered a fair weekly wage. The unionists refused to accept these terms, whereupon the company employed non-union men, and the case went to the Arbitration Court. The judges ruled that the union members must be reinstated, and the company had to discharge the men it had hired to take their places.

At Sydney the union of dock workers is so strong that no steamship company dares employ a non-union man. But once the wharfingers, as they are called, went a step too far. In order to create a shortage of workers and force up wages they stopped taking in new members. The ship owners had the union brought before the Arbitration Court, which decided that, although the dock men might keep non-union men off the Sydney wharves, they must keep their books open to receive new members.

One more case: An oil company employed six lads under twenty-one to tighten up the hoops on some casks. The coopers' union took the matter to the Arbitration Court, which upheld the men and declared this simple hammering was cooperage. The company was fined and had to discharge the youths and employ coopers at fifteen dollars a week to do boys' work.

I am told that decisions of this sort, and the laws behind them, have bred bad feeling between wage earners and the men for whom they work. A man of means is distrusted by the working classes, not because they may envy him his wealth, but because he is an employer. The capitalist class has little sympathy for the workers, while the employed have a strong antagonism for the employer, and so the Australians are a divided people.

But there is one subject on which all Australia is agreed, and that is that the continent shall be kept exclusively a

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white man's country. The workers and their unions are to a large degree responsible for this policy of a white Australia, but no party opposes it. The men in power say that Australia has learned her lesson in time, and that she will never let in cheap labour from China, Japan, and the surrounding islands which would lower wages and the standard of living. North and west of the continent are seven hundred millions of Orientals who would be glad to get out of their crowded countries into this thinly settled land of promise. Besides, all the Australians are proud of their British blood. They wish to keep it without a "taint of colour," and seem to be willing to pay the price in a smaller population and slower development.

Still, there are some Australians who doubt the advisability of Asiatic exclusion. Is it possible, they ask, for a population of five and a half millions to hold this vast area until it is filled up with white people? Australia has less than two persons to the square mile as compared with thirty-five in the United States and three hundred and fifty-one in the United Kingdom. The Commonwealth is less thickly populated than Siberia, South Africa, or even Arabia. Moreover, most of her people are concentrated along the east, south, and southwest coasts, which contain about eighty per cent. of the population, and there is a strong tendency toward concentration in the cities. Nearly one fifth of the white inhabitants live in Sydney and fortytwo per cent. are in the six capitals. Yet Australia is a land of raw materials. Her fields, farms, and mines need development, and this development calls for many people.

There are hardly any white men in the tropics of Queensland and the Northern Territory, where rich crops of cotton, sugar cane, tobacco, and fruits might be produced.

Some of the capitalists say that because of the climate these regions will never be developed until coloured labour is admitted to work them.

But most Australians feel it is better to delay indefinitely making money out of the tropical lands than to allow Northern Australia to be opened to swarms of Asiatics. They point to the Negro problem in our own South as an example of what would happen if the bars were let down, and predict that conditions would eventually become much worse than any we have in the United States. They prefer to depend on selected white immigration, chiefly from Great Britain, and also on their favourable birth rate. The births now average 24.6 per thousand of population, while the death rate is only 10.8, so that Australia enjoys a natural rate of increase of 13.2 per thousand. Some of the labour bodies go so far as to oppose even white immigration, clinging obstinately to the theory that there is only so much work to be done in Australia, and that if more people are admitted there will not be enough jobs to go round.

Exclusion of the coloured races is accomplished quite simply. Immigration officers are given the authority to compel each would-be immigrant to write fifty words in any language the officials choose. Like our own Chinese immigration laws, this provision is intended to exclude labourers and artisans; it is not meant to keep out travellers, students, or merchants.

The Australian leaders emphatically deny that their policy is founded on race prejudice or persecution. They declare it is merely "a defensive measure to prevent an intolerable lowering of the standard of living."

I had a talk with one of the parliamentary leaders



If some Australian labour leaders had their way, even white immigrants would be barred on the theory that this would lessen the competition for jobs and keep wages up.



Regular courses in all the domestic arts, including laundering, are important for the girls of Australia, where servants are luxuries of the few and women are thrown on their own resources.

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in Victoria about working conditions and the Australian standard of living. He said to me:

"I know it is commonly believed that we have an eighthour law down here in Australia. The fact is that an absolute eight-hour law would not suit us so well as our forty-eight-hour-per-week law. Many of our trades have such conditions that they cannot be restricted to a fixed time, and some days a man must work more than eight hours and sometimes less. Take the bakers. They set their sponge, and if the dough rises they can get through their work in less than eight hours; but if not, it takes them nine, or perhaps longer. What we have is a fixed time per week and an extra rate for all overtime. In New South Wales the forty-four-hour week prevails in many important industries. In certain unhealthful trades such as rock chopping, sewer mining, stone masonry, and underground mining of metals, the hours may be even shorter."

"Is there not a large force in the government employ?" I asked.

"Yes," was the answer. "In New South Wales the railroads, the street cars, and the wharves are under the state government. The state has also its employees for education, police, health, justice, state lands, public works, and other such activities. Besides, it operates timber yards, dockyards, brick and pipe works, stone quarries, and hydro-electric plants. Moreover, the Commonwealth government has its employees in the postal, telegraph, telephone, and other national services."

"How many state and federal employees have you here in New South Wales?" I asked.

I was surprised at the answer, which was: "More than ninety-nine thousand."

"And what is your population?"

"A little more than two million."

"Well," said I, "let us figure it. Divide your two million by ninety-nine thousand and you will find that practically one in every twenty persons works for the state. If we had a proportionate number of government employees in the United States, with our population of one hundred and ten millions, there would be five million government officials, which at the low average of a thousand dollars per annum would cost us at least five billion dollars every year. Our Congress would never stand for such a condition."

As far as I can see the workingmen live very well. Few of them have hollows in their cheeks or wrinkles in their stomachs. A few years ago some statistician calculated the value of the food consumed by workers in different countries, and according to his figures, an Australian has better food and more of it than the average American wage earner. The people are great meat eaters. The meat is good, too. I have never found better mutton anywhere, and the beef is as fat and as juicy as the best cuts from Chicago.

Like the British, these Australians drink an astonishing quantity of tea. Every man, woman, and child has a cup every afternoon, and, likely as not, another cup or so later in the evening. Tea is provided without extra charge at hotels, and at railroad stations it is served at the same tables as beer and whisky. The tea is always drunk with milk and sugar, and every person takes four lumps.

CHAPTER XVII

THE THREE "R'S" IN AUSTRALIA

WAY off here on the other side of the globe I have had a reminder of home. In the offices of the Minister of Public Instruction of New South Wales I found letters sent to Australia by children in the United States. Some of our school teachers interest their classes in geography by having the pupils exchange letters with boys and girls in other parts of the world. One such letter, which now lies before me, came from a thirteen-year-old boy in Nebraska and was answered by a Sydney lad of the same age. Both letters were read in class and here is what the Australian children heard about our "Corn-husker" state:

I live near Maitland, Nebraska. This is a fine place, only dry and windy at times.

Next I will tell you what we grow here. We use ploughs to stir up the ground and harrows to level it off. We plant oats and corn with a machine called a corn planter. We cultivate the corn with a cultivator three times. We cut the oats with a binder, shock it up and when it is dry it is hauled to the house and stacked. In the fall when the corn gets ripe we have to husk it and crib it up to keep it for our stock or sell it if we want to.

Our school begins at nine o'clock in the morning and closes at four o'clock in the afternoon. Then we go home and do our chores and get ready for supper. After supper I help in my father's store.

Most of the girls help their mothers do housework. When they think they get old enough they get married if they can find somebody to suit them. Well, I guess I will close.

Yours truly,
ARTHUR ASHLEY.

Australia has good public schools. In all the states primary education is free and compulsory. In New South Wales if children between seven and fourteen are not sent to school their parents are fined one dollar and twenty-five cents for the first offence and five dollars or seven days' imprisonment for each subsequent one. There are school officers who hunt up absent pupils, and the truants are sure to be caught. In Sydney a special school for truants has been established with a trained psychologist in charge, who makes a study of the causes and cure of "playing hookey."

The Australians try to give every child a chance to go to school, but this is often difficult in the sparsely settled areas. In many districts children must go by train to the nearest school and some of the state-owned railroads give them passes on which they ride back and forth every day without any charge. Where there are a dozen pupils in a neighbourhood, provisional schools are established. When attendance rises above twelve the provisional school goes on the regular public-school list. If there are not enough scholars for a provisional school, what is known as a half-time school is formed, which is visited by a teacher on alternate days. In still more thinly peopled districts teachers go from house to house. During one year fourteen itinerant teachers in Queensland travelled a total of sixty-seven thousand miles to give instruction to eighteen hundred pupils. In that state, also, there are ten schools where small groups of children of outlying districts have a teacher only once a week, on Saturdays.

New South Wales has three travelling schools. Each consists of a wagon or automobile with a tent for the teacher and one for the school. The teacher drives up,



Although every child is given a common school education, public high schools are not yet numerous. Preparatory school training is had mostly in sectarian institutions such as the Church of England Grammar School at Melbourne.



In this land of great unsettled tracts some children ride to school on horseback, others are carried free on state-owned railroads, and many have to wait for the round of an itinerant teacher.



Butter made in Victoria competes with that from Denmark in British markets. The state helps to maintain high standards in dairy products by giving expert instruction to farmers and their wives.

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sets up his tents, takes out his books, administers a dose of instruction, and at the end of a week moves on to the next place. New South Wales has also correspondence courses for pupils cut off from other means of education. Grade subjects are taught by mail to children between the ages of seven and fourteen. These courses were started in 1916 as an experiment and have grown so popular that there are now seven hundred children enrolled at the Department of Education at Sydney and fifteen teachers are required to direct their work.

It is no wonder that practically every man, woman, and child in the Commonwealth can read and write, a fact that should take some of the conceit out of us when we recall that in the United States twenty-five per cent. of the men examined for our army in the World War were illiterates.

The Australian school child's health is well looked after. Medical inspection, and often medical treatment, is provided in the city schools, and the school departments of several of the states have travelling hospitals and travelling medical, dental, and eye clinics.

For many years Australia had few public high schools, and state education stopped at the age of twelve or fourteen years. But high schools are now quite common and are growing in numbers and in the variety of subjects taught.

The schools of art are a feature of education in this part of the world. In Queensland the government contributes dollar for dollar, or rather pound for pound, to any town that raises a fund for this purpose. For instance, if a village will put up one thousand pounds to establish a library and school of art, the government will give another thousand, and will continue its gifts as the people give

more. These schools of art teach not only drawing, painting, and music, but also typewriting and stenography, and, in fact, about everything you will find offered in the Young Men's Christian Association courses in the United States. All have reading rooms, and their libraries are well supplied and largely patronized. The School of Arts in Sydney has a library of sixty thousand volumes.

In addition to these schools every city of any size has its technical schools. Sydney has a technological museum with eighty-two thousand exhibits including one thousand specimens of wool. The museum building alone cost one hundred thousand dollars. In Melbourne there is a Working Men's College with buildings and equipment worth upward of a quarter of a million dollars. The college is open to both sexes and now has enrolled more than two thousand students. Many of its classes are held in the evening, when there are lectures upon applied science, engineering, mining, commercial law, and other technical subjects, as well as on the leading trades.

The twenty-five technical schools of Victoria are under the direction of the Education Department. Among the trade subjects taught are photography, wood and metal working, plumbing and gas fitting, carpentry, coach building, wool sorting, and house and sign painting, with cooking and dressmaking for the girl students.

Every state in the Commonwealth has its university at the state capital. I visited Sydney University, which has about as many students, both men and women, as Leland Stanford University in California. It confers degrees in art, science, law, and medicine, and the courses embrace all branches except theology. Its graduates are received at Oxford and Cambridge on an equal footing with those

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from British institutions. The same thing is true of graduates of the University of Melbourne.

Compared with the enrollment at similar institutions in the United States the attendance at Australia's high schools and universities is not large. Our state of Washington and the state of Victoria have about the same population. Yet Washington's high schools and its state university have four times as many pupils and students as have the Victoria secondary schools and the University of Melbourne combined. In all the state universities together there are less than seven thousand undergraduates. As a people, the Australians are sometimes criticized for not being interested in higher education. In fact, the true stories of the thousands of American boys and girls who make sacrifices and do all kinds of work to put themselves through college read like fiction to the young Australian.

Every state has its agricultural college and all run experimental farms to develop new methods and new crops. Agricultural experts are sent travelling around the country lecturing to the farmers, and special schools are organized to meet any new need.

For example, in order to help the dairy farmers build up a big business, the state governments had their agricultural schools give instruction in making butter and cheese. The result is that there are now a number of large butter and cheese factories in every state and the exports of dairy products are rapidly increasing.

Victoria and New South Wales now produce more than one hundred and twenty-five million pounds of butter and about fifteen million pounds of cheese every year. The dairy cows of New South Wales alone yield enough milk annually to give a gallon to every man, woman, and child

in the United States, while if the butter export of the Commonwealth were sent to us, we would get nearly a pound apiece. Most of the Australian butter sold abroad goes to British markets.

The beginning of dairying in Victoria is interesting. One of the butter makers talked to me about it while I was in Melbourne. Said he:

"Twenty-five years ago we made no butter to speak of. Our total shipments did not amount to more than fifty thousand pounds a year. Then the government came in and helped the farmers. It arranged a scale of bounties for butter exports which was to continue for four years. For the first year we were to receive from the government a bonus of four cents per pound for all the butter shipped, the second year three cents, the third year two cents, and the fourth year one cent. The people at once began to study and experiment. Men who until then would not have a dairy cow on their places bought good stock, and now our butter is selling at high prices in both Asia and Europe. We use American machinery in our dairies."

The number and circulation of Australian newspapers show that there is no lack of interest in reading among the people. Including the magazines and the trade journals, nearly a thousand newspapers and periodicals are published on the continent. In Melbourne the leading dailies are the *Argus*, the *Age*, and the *Herald*. The Sydney *Herald* is taken in all parts of Australia, and one sees the Sydney *Mail* everywhere. Brisbane, Adelaide, and Perth have both morning and afternoon dailies, and, in fact, there is scarcely a large town on the continent which has not four or more papers. The most popular weeklies are the Sydney *Bulletin* and the Melbourne *Australian*,



Some of the aborigines are housed at the back-block mission stations, where their children are given an elementary education. But most of them are nomads and call only occasionally on the state aborigine boards for supplies of food and clothing.



The Australian aborigines were cannibals in the past, and still stand at the bottom of the ladder of human progress. They are incapable of advancing in contact with civilization and are now a dying race.

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the Adelaide *Observer*, the *West Australian*, and the Sunday *Sun*. The big city newspapers have Saturday editions of many pages, which sell at four cents a copy and go out to all parts of the Commonwealth. There are all sorts of agricultural journals, sheep journals, and financial journals.

As a rule the Australian newspapers are less sensational than those in the United States, yet more lively than the English newspapers. Judging by the amount of advertising they carry, I should say that the owner of a popular Australian paper has a gold mine.

CHAPTER XVIII

THE ABORIGINES

"blackfellows," and they sometimes use the word "nigger," but the few natives I have seen were chocolate brown rather than black. Their hair is curly, but not woolly, and they have neither the thick lips nor the very flat nose of the African. Some of the aborigines are quite fine looking; they are generally straight and well formed, although often lean. In Townsville, Queensland, I saw a "gin," as the women of the aborigines are called, who would have passed without notice in any mixed crowd of coloured people of our Southern States. She was about eighteen years old, with the skin of a mulatto, high cheekbones, a slightly receding chin, and a big mouth. Her hair was fine, smooth, and glossy.

This girl had on European clothes, but in the interior of northern Australia both men and women go naked, or at most have only a few ornaments in their noses and ears, with perhaps a string or two about their waist for carrying their crude weapons. In northwestern Queensland the natives put on belts of human hair for certain ceremonies. They wear grass necklaces and often stripe their bodies with paint. Sometimes they have several opossum skins about their shoulders. They make their hair stiff with fat or clay and tie bands about it to keep it from falling into their eyes. Hair grease is profusely used everywhere and

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the native gives himself a coat of fish oil when he can get it. This envelops him in a rancid smell which is very offensive to Europeans. The methods of dressing the hair vary. Sometimes it is bound up with cloths, and the knuckle bones of the kangaroo are so fastened to it that they hang down over the ears, or kangaroo teeth are tied to the forelocks, so that they dangle between the eyebrows.

About Port Darwin in northern Australia the blacks wear nose pins, some of which are ten inches long. The nose is pierced in the centre, and the pins are thrust through so that they stand out for five inches beyond the nostrils. They are made of the bones of turkeys, kangaroos, or emus. Occasionally parrot quills are used with the bright-coloured feathers sticking out on each side of the nose. Some of the natives pierce their ears and insert kangaroo bones as plugs.

Nearly all the aborigines have scars upon their bodies and the bigger the scars the prouder the owners. To make ornaments the skin is cut with flints or shells, powdered charcoal is dusted in, and the wounds are kept open for months, so that when they heal they leave ridges on the body as thick as your finger. These scars are found on the native's back and chest, on the biceps muscles, and sometimes on the thighs and stomach. Among certain tribes the men are scarred by having little pieces of skin cut out to the tune of the victim's yells of pain.

The scars on the women are not always voluntary, but are often the result of the cruel treatment inflicted upon them by their husbands. The men regard their wives as their slaves and when angry, club them and cut them with their stone hatchets or jab them with their hardwood

spears. If a woman is killed in this family discipline, it is not considered a matter of consequence. The aboriginal wife has no rights that the men are bound to respect, and if she is caught away from home any one may maltreat her. As a daughter she is sold or given away by her father or brothers, and after marriage she is a drudge and slave. A husband can lend his wife to a friend or give her away. He can forbid her speaking to another man, and in some tribes she is not allowed to exchange a word with her grown-up brothers. She is often a bride at the age of ten, and is usually married before she reaches sixteen. There are many bachelors among the blacks, but no old maids, for even a homely girl can work.

When a man dies his widows become the property of his eldest brother, who can keep or dispose of them, as he pleases. The eldest brother has the right to give away or trade off his sisters, and the father often exchanges the females of the family for wives for his sons.

The native woman of Australia cannot complain that all the professions of her tribe are not open to her. She does all the work, from building the house to getting the food and nursing the baby. Most of the tribes are nomadic. They build little shelters of bark or skins wherever they camp, making a new village at each stopping place.

In travelling, the woman carries all the belongings of the family. She is laden down like a pack horse and walks along bent over behind her husband, who, perhaps, carries nothing but his clubs and boomerangs. If she falls behind the rest of the party she is pretty sure of a whipping from her lord and master. As soon as they come to a new camp the woman cuts the bark and builds the hut. She then goes out and digs roots, picks fruit, and climbs the

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trees to chop out the larvæ of worms, which she cooks for breakfast. She often carries her child with her, laying it on the ground as she digs. As a result of such treatment she ages rapidly, her hair soon grows gray, her face wrinkles, and she dies at about thirty. Even the men seldom live to be more than fifty.

The lives of the aborigines are shortened by exposure, poor diet, and contact with civilization and its vices. They are said to be the least developed people of the world. I am told that they live more like animals than human beings. Their food is largely vegetable, including all sorts of roots. They collect wild fruits, and for bread they make a sort of paste of grass seeds moistened and ground between stones into a flour. This they make into dough and eat it either cooked or raw. A favourite dish is wild honey, which they find in the hollow trees by following the bee to its hoard.

They are fond of ants, worms, and snakes. There are ants in all parts of Australia, and certain varieties are caught by the aborigines. The native stands upon an ant hill and stamps with his feet, whereupon the insects run up his legs. After his shanks are well coated he scrapes the ants off and eats them. The larger kinds are roasted or dried in the sun.

Another delicacy is the beetle, which is consumed both as a worm and as a matured insect. The worms are picked out of the rotten trees and cooked in red-hot ashes. Foreigners who have eaten them say that so served they are not at all bad, and that they look and taste like an omelet.

Snakes and lizards of all kinds are roasted. The enormous iguana lizard is especially liked. This reptile tastes much like a young chicken, and its legs are greedily de-

voured by the Australian aborigines. It is eaten also throughout South America.

The natives are fond of grasshoppers and locusts, which sometimes come in great swarms. At such times the women gather them by the basketful and the people have a great feast. They first throw the grasshoppers into the fire to burn off the wings and legs and then drag them out and roast each one separately. The flesh so prepared tastes not unlike roasted chestnuts.

There seems little doubt that the Australian aborigines are cannibals. The records show that they were cannibals in the past and according to credible stories the eating of human flesh continues among them in parts of Australia to-day.

The government reports give instances of cannibalism. Some years ago a man named Edwards saw the natives roasting an infant in one of their ovens. He watched the blacks open the body and begin eating the flesh, but the sight made him so faint that he was not able to continue his observations. In his book, "Among the Cannibals," Carl Lumholtz says that the natives consider nothing so delicious as the flesh of a black man, although any human flesh is a delicacy. In parts of Queensland children who die suddenly are roasted, and there is proof that they have even been killed for food. In western Queensland the flesh of the full-blooded blacks is preferred, but half-caste children are roasted and eaten. The blacks are said to prefer the flesh of the Chinese or the Malays, who are vegetable eaters, to that of meat-eating Europeans, whose flesh is tougher and more salty.

Many Australians have told me that the blackfellows have more intelligence than is generally supposed. They

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show evidences of reasoning powers and marvellous skill in trailing men and animals. Their children are taught to trace snakes and lizards over bare rocks. Even the tiniest track on the hardest ground does not escape the really untamed aborigine. For this reason blackfellows are regularly attached to the bush police force, like so many bloodhounds, to track escaped criminals or men lost in the desert. The black tracker almost invariably gets his man, even when the criminal is mounted and his pursuer afoot.

The Australian bushmen have a saying: "Get a black and you'll find water." Parties going into unknown dry lands in the west take along an aboriginal, for when there is no water to be had from sandy basins or deep hollows in granite rocks which still hold some of the last rain, the blackfellow is able to find roots of desert trees with which to quench thirst. He draws water from these roots by cutting them into short lengths and letting them drain, a drop at a time, into a wooden bowl.

As hunters the blacks get the largest game without firearms. They trap emus, hunting them with dingoes, and driving them into nets and pitfalls. In the wilds, hunters station themselves near the water holes and wait until the emu comes down to drink. They then rig up a net across its path, drive it in, and when it has become entangled, kill it with their spears or clubs. They imitate the call of the bird by pounding on a piece of hollow log. Sometimes a man will cover himself with bushes and thus creep up on an emu and kill it.

The aborigines catch kangaroos in nets or run them down with dogs and spears. They go into the water with bushes about their heads and sneak up on ducks and cranes. To

get fish they sometimes poison the water with certain plants and capture them as they rise to the surface. The native way of taking catfish is to wade the streams and feel for them with their feet. They kill the fish by biting deeply into the flesh just back of the head.

I bought several boomerangs the other day for fifty cents apiece. The boomerang is merely a flat curved piece of wood, about two inches wide and from twenty inches to a yard long. It is so shaped that when correctly hurled it will return to the thrower. The natives display great skill in throwing boomerangs, but do not, as I had supposed, use them as weapons. They sometimes kill small birds with them, but usually the sticks are merely playthings. For fighting and for all heavy hunting the blackfellows prefer spears and lances, some of which weigh as much as four or five pounds and are nine feet in length. They are barbed with bone, flint, iron, or hard wood.

As far as I can learn, the aborigines reverence no Great Father as do our Indians, although they believe in a future state and happy hunting grounds. They have a great dread of ghosts and demons, and think that certain places, such as caves and thickets, are haunted by them. Their witch doctors are supposed to cure diseases, which they are sure are caused by spirits. The doctors pretend to locate the demon, and to suck pieces of wood out of the body where the pain is. The blacks are convinced that most of their woes are due to sorcery, and that certain men can cause others to fall sick and die. They believe their medicine men can make rain and so hold them responsible for drought as well as for any other suffering of the tribe. The aborigines use all sorts of charms to ward off evil spirits. They have an idea that the white settlers



In their fondness for any kind of sport the Australians sometimes shoot turkeys from an airplane. The males of one variety of this bird always tend the nest when it contains hatching eggs.



A full-grown kangaroo standing on his hind legs may be taller than a man, but his newborn infant is often only an inch long. The baby is almost transparent and must stay a long time in the mother's pouch.

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are dead natives come to life again and claim that they themselves will appear as white men after death.

As the future state of the aboriginal is thought to depend largely on how he is buried, the natives are very careful to inter their dead fellows with certain rites. The men are usually trussed up before burial. The knees of the corpse are bent up to its neck and tied there, the arms are bound to the sides, and the calves forced up to the thighs. Then rugs of skins or pieces of bark are fastened about the body, and it is buried three or four feet deep in the sand, a mound covered with logs being erected above it. As for the women and children, they are considered of no account, either dead or alive, and their remains are usually rolled up between sheets of bark and covered with earth.

In some parts of Australia the aborigines practise cremation, while in others the dead bodies are dried before fires until they turn into mummies. Some tribes lay the dead out upon platforms in the trees, and allow the birds to clean the bones, just as the bones of Parsees are cleaned by the vultures when the dead are exposed in the Towers of Silence at Bombay. Afterward the bones are buried in the earth or dropped into hollow trees.

The aborigines of Australia are a dying race. Nobody knows how many were here two centuries ago, but it is estimated that there are now only sixty thousand of them left. Of these perhaps a fourth are in Queensland, a half in Western Australia, and ten thousand in the Northern Territory. There are only about one hundred in the state of Victoria, and only about fifteen hundred in New South Wales. South Australia has sixteen thousand. The native race of Tasmania is entirely extinct, its last

member having died in 1876. These figures are not exact, for no accurate census of the aborigines has ever been taken. They live in the wilds, and in the vast regions of unexplored Australia no one can tell how many there are.

CHAPTER XIX

KANGAROOS AND DANCING BIRDS

USTRALIA is a country where every other animal carries its baby in its breast pocket. It has one hundred and ten different varieties of marsupials, or animals which have in their bellies pouches in which they carry their young. Some of these animals are taller than a man and some are no bigger than your thumb. Some climb trees, some gallop over the plains, and some spend more than half their time in the water. During my travels I have seen certain varieties in their natural surroundings and I have examined and photographed others in the zoölogical gardens. Every city here has its zoölogical garden, and every town has its museum, so that there is no trouble seeing the wild animals of Australia, either stuffed or alive.

What interests me most is the kangaroo. Before I came here I had an idea that all kangaroos were alike. I now know that there are forty-nine varieties, ranging in size from the great gray kangaroo, the male of which measures from nose to tail tip more than seven feet, down to the kangaroo rabbit and kangaroo rat. The Sydney and Melbourne zoos have specimens of nearly every kind. In them I saw kangaroos taller than I am, jumping around in fields inclosed by wire fences. They had enormous hind legs, which sent them flying through the air as though they were on steel springs. They can leap thirty

feet at a jump, and gallop over the country faster on two legs than a horse can on four. But, as they tire quickly, horses can overtake them in the end.

The largest of the kangaroos are the red and the gray varieties, which are found all over Australia. Horses and dogs are bred for the sport of hunting them. The dogs are a cross between the greyhound and the deerhound, fleet of foot and very fierce. When brought to bay, the big kangaroo is dangerous and will attack a dog or a man. With its back against a tree it waits for its enemy. A dog that comes too near is grasped in the kangaroo's forearms, hugged tightly to its breast, and disembowelled with a rip of one of its clawed feet. The ivory-like claws on the kangaroo's hind feet are three or four inches in length, and cut like knives. The kangaroo can swim as well as run, and when chased, it will, if possible, take to the water. If a dog follows, the kangaroo tries to drown it by holding it under water.

The kangaroos go about in pairs. One usually sees a male and a female together and the little head of a baby kangaroo is often spied sticking out of the pouch of the mother. When it first sees the light of day the baby kangaroo is not more than an inch long. It has no hair and is almost transparent, like an earthworm. Its mother puts it into her pouch, and there it lies and sucks until it grows big enough to come forth and eat grass. Even then it crawls back into the pouch whenever it is tired or at the least sign of danger, poking its head out now and then to see if the coast is clear. It leaves the pouch for good after eight or nine months, when it weighs eight or ten pounds, and has become too heavy for the mother to carry.



The opossum is the only one of the Australian marsupials to be found anywhere else in the world. Quantities of the fur are exported, to be used as trimming on women's coats.



Except for the opossum and opossum rat of Patagonia, marsupials are found only in Australia. We import quantities of Australian opossum fur as trimming for women's coats.

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Most kangaroos are plain dwellers and grass eaters. Carl Lumholtz was the first to discover a variety that lives in trees. He found them through the blacks of northern Queensland, and with their help was able to get several specimens. There are some in the museum at Sydney and I am told that others have been sent to several museums in Europe.

The tree kangaroo is a baby beside its big gray and red cousins. Its head is like that of a squirrel, and its body is better proportioned than that of the kangaroo of the plains. It has arms and legs about eight or ten inches long, and a tail a little bit longer. It spends most of the time in the trees, sleeping there in the daytime and coming down only at night for water. It eats tree leaves. This animal is considered a great delicacy by the blacks, who have trained the dingoes to tree it. Then the natives climb, not only the tree in which the kangaroo is lodged, but all the trees near by, in order to catch it if it jumps from one to another.

The musk kangaroo is so small you can put it in your pocket. There is a kangaroo that looks like a rabbit, known as the hare kangaroo, and another called the rat kangaroo. One of the commonest of the small kangaroos is the wallaby, which is killed for its skin, as are many of the other kinds. There is a great demand for kangaroo leather for bags, shoes, and other articles, and quite a lot is exported to the United States.

Australia has a curious little beast which is a sort of link between the mammals and the birds. This is the platypus, which has a bill like that of a duck, and feet so covered with webbing that it can swim. Yet it nourishes its young with its milk. It tunnels in the earth

like a mole and is usually found along the fresh-water streams of Tasmania and Victoria. It feeds upon small water insects, shell fish, beetles, and vegetable particles. It is sometimes speared by the blacks, and white men occasionally catch it with night lines.

The life of the platypus is interesting. A pair will live in a little tunnel, one of the openings of which is below the water and the other in the bank just above it. Their nest is in the tunnel, halfway between the two doors, the water door and the land door of their house. Here the female hatches her young, laying one or two eggs for each setting. As with the American skunk, the odour of the platypus advertises its presence for miles around.

Platypus fur is most beautiful, although the animal is so scarce that it is hardly an article of commerce. I have a skin of one about twelve inches wide by eighteen inches long. The fur is as soft and smooth as moleskin, but the bill and the legs are as hard as horn. The skin is sometimes used to make rugs, a good platypus rug being worth at least one hundred and twenty-five dollars.

Some of the queerest animals of this continent are found along the coast. Penguins live on the islands of the far south, and the big-billed pelican is common, especially on the coral reefs off Queensland. There are also seals, and a sort of sea cow, which excited great interest some years ago on account of its likeness to the fabled mermaid. In the first days of Australia one of a party of fishermen collecting bêche-de-mer on the Queensland coast imagined he saw some of these wonderful creatures, half-woman, half-fish. He came running to his companions saying that he had seen some mermaids disporting themselves in blue sea grass. One of them,

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he declared, had raised her head and shoulders out of the water and looked at him. He had been so terrified that he had fled to the ship as fast as his legs could carry him. Later on the men discovered that the supposed mermaids were the Australian dugongs. The mothers constantly hold their young to their breasts and in this position look not unlike the traditional mermaid.

The dugong is somewhat like a porpoise. It has a smooth round body, a broad, fat tail, and two anterior flippers, which are short, thick, and fleshy. Its head has a rounded muzzle and the mouth of the male has projecting tusks. When fully grown the dugong is from eight to ten feet in length, but it sometimes attains to as much as twelve feet. The animals gather in herds of from half a dozen to forty and swim about together. The females, which are more numerous than the males, cry like human beings when suckling their babies.

The dugongs are found chiefly in the tropical waters about the north coast. The natives hunt them under the direction of white men, chasing them in boats or bark canoes, and spearing the cows with harpoons. The best place to strike is through the tail, for the animal is quite powerless once its tail is lifted out of the water.

The natives are fond of dugong flesh. They cook and eat it, boiling down the fat for the oil, which has a medicinal value like that of cod liver oil. The hides and the large tusks of the male are marketable.

I wish I could show you some of the odd birds of Australia. The continent has more than seven hundred varieties, some of which are found nowhere else. In the Brisbane museum I saw scores of different kinds of parrots, some as white as snow, others of a delicate pink,

and others as red as blood. The lyre bird, which is one of the most curious of all, has a tail shaped just like a lyre. The satin-bower bird builds a playground near the tree where it has its nest. This is a sort of platform, sometimes three feet in diameter, made of sticks woven together. Over this the male birds build a bower of woven twigs, decorating it with all the beautiful things they can find. They weave gay feathers among the sticks, and put bones and shells here and there. Some of the bowers found in the vicinity of settlements are ornamented with pieces of broken china and glass. One variety decorates the bower with fresh flowers every day. These bowers are not nests nor are they the homes of the birds. They are supposed to be the rendezvous, or courting places, where the males dance and strut before their lady friends.

The young bower birds are bright green, but when full grown the males are of a deep, shining blue-black closely resembling satin. They have blue bills, yellow at the tip, and their legs and feet are yellowish white. The females are green and brown, with bills of a dark horn colour. The birds are found all along the east coast of Australia and in many parts of the interior.

You may know the little poem by the small boy who was indignant at having his pennies put in the Sunday-school box. One verse reads:

I wish I were a cassowary
In the wilds of Timbuctoo.
Wouldn't I eat a missionary,
Skin and bones and hymn book, too!

Australia is the land of the cassowary. In part of the country there are thousands of these great birds, which resemble the ostrich and the emu. The ostriches and the



Sydney is not only the fastest-growing city of Australia but also the commercial metropolis of the South Seas. About the size of St. Louis, it handles the bulk of the trade of New South Wales.



Most of Australia's wheat still goes overseas in sacks, loaded in ships by belt conveyors, but the grain elevators being built in increasing numbers permit the grain to be handled in bulk at less cost.



The companies operating the world-famous silver and lead mines at Broken Hill and the steel works at Newcastle have been large buyers of American mining machinery and of plant equipment and tools.



American automobiles dominate the market in Australia. Here the motor-car is now regarded as a necessity, especially in the back country where distances are great.

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emus live on the open plains. The cassowaries are found in the forests and brushwoods. They are wary birds and seldom come out of the jungles. I have seen a number of them during my stay in Australia. The bird is about four and a half feet high, with black feathers, brown at the base. It has eyes like an eagle, and a long, thin neck, with a naked head, and flat but powerful bill. The cassowary's legs are very strong and look more like clubs than bird legs. They end in three large claws like those of an emu.

The emu is the national bird of Australia. It is larger than the cassowary, and is often five or six feet in height. It is much like the ostrich, except that its legs are shorter and its body more thickset and clumsy. Its dull brown plumage spotted with gray looks more like coarse hair than feathers, and emu skins are sometimes used for rugs. The cassowaries have no hair on their heads, but the heads of the emus are completely feathered, or I might say haired. The wings are so short that they are invisible when held close to the body. The birds are quite dangerous and can kill a dog or a man with a kick.

Hunting emus is one of the favourite sports of Australia for which dogs and horses are specially trained. The best time for a hunt is early in the morning, when the birds go out to feed on grass. The dogs are taught to catch the emus by the neck, else they may be killed by the bird, which kicks backward or sidewise like a cow. In some sections the settlers try to destroy them, to save the grass for the sheep. They send out men to hunt for the nests and break the eggs. On a back-block sheep station fifteen hundred eggs were destroyed at one time, while in one county of New South Wales ten thousand emus

were killed in nine months. In the thickly settled portions of Australia they have been practically exterminated. The aborigines hunt them for food, eating the flesh with the skin on it. They are especially fond of the hind quarters, which taste not unlike beef. Emu eggshells are sometimes mounted in silver and used as milk jugs or sugar bowls.

Among the kingfishers is the kookooburra, or laughing jackass. Its hoarse cry is like a laugh and can be heard for miles through the forests. This bird has a head about as big as its body, but its laugh is a thousand times bigger than both body and head. It says, "Ha! ha! ha! hoo! hoo! hoo!" contemptuously laughing again and again, until at last it puts the nerves of the bush traveller on edge. It eats snakes, lizards, and other reptiles, and for this reason is protected by law.

CHAPTER XX

AUSTRALIA AS OUR CUSTOMER

SHOULD like to take any one who doubts the importance of Australia's foreign trade down to the wharves of Sydney harbour. There he would see great steamers from London, Marseilles, and other great European ports, and smaller vessels from India, China, Japan, and the islands of the South Seas. He would see merchant vessels from South Africa, and ships from New York and San Francisco flying the Stars and Stripes.

An American in business here has shown me the tally sheet of a single shipment of American goods landed at Sydney from one of the ships out of San Francisco. It included four hundred tons of sewing machines, one thousand tons of fencing wire, and four hundred tons of roll paper. There were also hardware, machinery, and machine tools; lubricating, illuminating, and fuel oils; chemicals and tobacco.

We sell to Australia at the rate of about sixteen dollars for every man, woman, and child of her population. American goods are displayed in all the stores, and American farming implements are used on most of the farms. The Australians like our hatchets, which they call tomahawks, evidently thinking we first made them as weapons for the Indians. Our carpenter's tools are in demand, especially our saws and augurs, braces and bits.

American notions are sold everywhere. In Townsville, Queensland, I saw patent camp chairs with the Yankee trade-mark on them; our cuff clasps and collar buttons are in common use, and there are all sorts of knicknacks, marked American and sold as such. In fact, the shrewd Australian shopkeepers sometimes take advantage of the favourable reputation our goods enjoy. The other day I dropped into a store that advertised American candy, and asked the tall young lady clerk what brands they imported from the States. She replied that her "American" sweets were made in Sydney, but they called them American because they thought this would make them sell better.

The Australians smoke American tobacco. They use finecut and plug, shaving off the plug for their pipes. The favourite brands are not those most widely known in the United States, but I venture they differ only in name. The cigars smoked by the Australians are made chiefly in the local factories, but the tobacco in them comes from the United States. In the great island of New Guinea, which is administered by Australia, our tobacco is often used as money, so many plugs buying a dinner, an old coat, or, maybe, a wife.

Australia is the land of the well-to-do. Out of every twenty-five grown-ups in the Commonwealth, seven are property owners, and even in the big cities, poverty slums scarcely exist. Of the five and a half million people in the Commonwealth, more than three million have savings accounts, their deposits aggregating more than seven hundred million dollars. To show Australia's purchasing power another way: in one of the early post-war years, when our foreign sales were unusually large, China, with her teeming population, bought only one hundred and

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thirty-eight million dollars' worth of our goods, while Australia, with one sixtieth as many people, bought one hundred and twenty million dollars' worth.

The Australians are good spenders. The people of all classes dress well and live well. The women of Melbourne wear their clothes with as much of an air as those of any city in the United States. They buy expensive hats and in midwinter nearly every girl has her furs. As a rule the city business men wear silk hats. Their suits do not fit quite so well, perhaps, as those cut by American tailors, but they are far better looking than the average suit made in London. Men's clothes cost about as much in Melbourne and Sydney as in New York, and American styles, especially hats, seem to be in demand.

American-made stockings really command the Australian market, and the well-to-do women, certainly those of the cities and large towns, all wear silk hosiery from our mills. The same thing is true of American-made corsets. Both men and women seem quite willing to pay the higher prices demanded for our shoes, which are looked upon with the same high favour as in other parts of the world. The men buy mostly high shoes, or "boots," as they are called, though in the cities oxfords are gaining in popularity. The women like our "low cuts" and will pay fifteen and eighteen dollars for a pair of smart, well-shaped pumps, which they call "court shoes," or strap slippers, known here as "bar shoes."

A great deal of our lumber used to come to Australia, not only in the shape of boards and logs, but as paper, some of the Australian newspapers being printed on paper made from American wood pulp. But the shipments of newsprint from the United States have declined

since the duty has risen to fifteen dollars a ton and Canada now gets a large share of the business. Many of the publishers use American type. A linotype salesman of one of the American firms tells me that he has scattered his machines throughout the states.

The leading American typewriters are well known in Australia. Some of the agencies conduct business training schools besides renting and selling machines in the same way as in America. One may buy American cameras in any large centre, and the American bicycle is to be seen everywhere. Our electrical supplies and equipment also have a splendid market in Australia.

Although Australia is beginning to manufacture her own woollen goods, she still buys a large proportion of her textiles from England and the European continent. Nevertheless, American firms have built up a large trade in cottons, particularly shirtings, calicoes, and denims.

Credit is the latest commodity imported from the United States. Until 1921 London bankers had enjoyed a monopoly in handling the bonds of the Australian states. In that year Queensland disagreed with the home government over a question of legislative policy and came to New York for money. Two loans amounting to twenty-two million dollars were floated in Wall Street at six and seven per cent. These bonds soon sold above par, and it is believed that the loans will help promote our trade in Queensland.

In a recent year Australia was the largest foreign purchaser of American automobiles and all our leading motor-car companies now have well-established agencies here. The Commonwealth is as big as the United States yet it has only one tenth as many miles of railroads, so that

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the motor car is a great aid to travel, and is becoming, as with us, a business necessity. At present the Commonwealth has only one car to every seventy-three people, while the United States has one to every ten and Canada one to every sixteen. American automobiles selling for from seven hundred to twenty-four hundred dollars are the most popular. On account of freight and other charges, the selling price of any car is nearly twice that of the same make in the United States. Gasoline, tires, and other motor supplies also cost about double as much as with us. Hence the car that has a low gas consumption and is easy on tires makes a stronger appeal than do the heavier machines. Some tires are now being made in Australia, the local factories supplying about half the demand of the country.

As a rule, the automobile chassis only is imported from the States. This is because the Australian tariff has been framed so as to protect and develop the local body-making industry throughout the Commonwealth. The duty on an American or foreign car, body and all complete, is exceedingly heavy, while the duty on the chassis alone is moderate. The Australian manufacturers turn out good-looking automobile bodies. They are not so standardized as are ours, as the makers are willing to cater to individual tastes.

Speaking of local manufactures reminds me of a great change that has taken place in Australia's markets in the last few years. It used to be that every town of any size had hardware stores stocked with American-made farm implements and machinery. As I have said, our ploughs, reapers, saws, hatchets, and hammers are largely used, but they are not sold now in the same proportion as for-

merly. This is because Australia has begun to use her abundant supplies of coal and iron to make her own steel. The business began in a big way with the Newcastle works of the great Broken Hill Mining Company. This concern was started soon after the discovery at Broken Hill, New South Wales, of some of the richest silver deposits on earth. The original company issued a small amount of stock at five hundred and fifty dollars a share. A year later one share sold for one hundred and fifty thousand dollars and six years later was worth, with dividends and bonuses, the sum of seven and a half million dollars. Eleven companies, more or less interrelated, are now operating at Broken Hill, mining lead and zinc as well as silver.

One of these, the Broken Hill Proprietary Company, Limited, opened iron works at Newcastle just after the outbreak of the World War. Cut off from other sources of supply, the various state railways poured in orders for material, and since then there have grown up about this and a similar plant at Lithgow affiliated industries producing iron and steel goods. One is making galvanized iron, so much of which is used all over the country for roofs, tanks, and even houses. Another is turning out wire nails and fencing. A third is kept busy producing car-wheel tires and axles. At Melbourne is the plant of the Sunshine Harvester Company, which employs four thousand workmen and makes tractors and other kinds of agricultural implements. In all, close to one hundred and thirty metal and machinery plants are fabricating domestic or imported iron and steel.

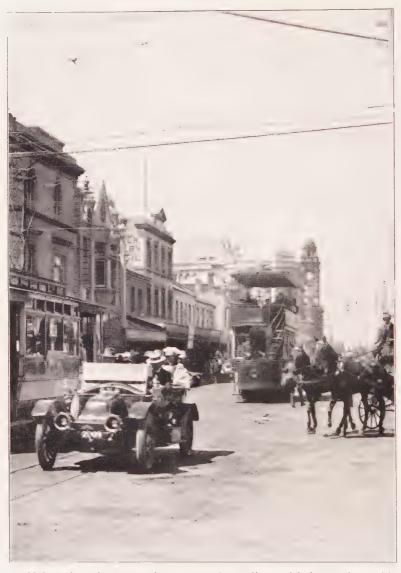
In one way, the effort to develop home industries has helped American trade. It has created an enormous



This stripper harvester is a product of Australia's attempt to make her own farm machinery, for it was manufactured at Melbourne. The dry climate makes it possible to thresh the wheat as it stands in the field.



American agricultural machinery is widely used in Australia but must now compete with implements produced in the Commonwealth and protected by the high tariff policy.



Hobart has the reputation among Australians of being a slow, old-fashioned town, though recently it has been rejuvenated by the hydroelectric power development at Great Lake.

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demand for American machinery, tools, and other equipment with which to operate the new factories. Not long ago the state of Victoria ordered two enormous electric generators and other machinery for a power plant being erected at the so-called "brown coal" mines in that state to furnish current to Melbourne, ninety miles away.

The Commonwealth government has set up a high tariff wall around everything manufactured in Australia, and is doing all it can to foster home industries. Some British companies have already established branch factories here to be inside the tariff wall. A great advantage of the branch plant is the fact that it brings the British exporter several thousand miles nearer to his Far-Eastern markets. When it comes to making goods for export in competition with other countries, however, the local manufacturer is somewhat handicapped by the higher labour costs in the Commonwealth.

Great Britain has a preferential tariff arrangement with Australia so that certain of her goods come in at lower duties than those paid on similar goods from the United States or other countries. Yet, in spite of this "imperial preference," our trade is healthy and growing. We sell Australia more than one fifth of all the goods she buys abroad and take a good proportion of the half billion dollars' worth of wool, hides, pearl shell, and other raw products that she annually sends into the markets of the world.

CHAPTER XXI

TASMANIA

WRITE this in one of the "farthest south" towns of the globe. Hobart is twenty-five hundred miles below the Equator, with nothing but ocean between it and the frozen lands of the Antarctic. It is now the end of April, late in the fall in this topsy-turvy land, but the grass is as green as in old Ireland in June, and, although Mount Wellington, back of the city, has a coat of snow, the sheep are everywhere feeding out-of-doors, and it is as warm as Ohio in May.

As I look around me I cannot realize that this is Tasmania, the country I studied about years ago as Van Diemen's Land. I had read of the cruel treatment of the criminals sent out to it from England. I knew it was an island somewhere between the South Pole and Australia. I had an idea that it was bleak, bare, and inhospitable, the jumping-off place of creation, and it seemed that to visit it would hardly be worth the time and expense.

I have changed my opinion. Tasmania is the Switzerland of the southern Pacific, and one of the most healthful and beautiful lands of the globe. It is a heart-shaped island, with its top less than two hundred miles from Australia and its point toward the Pole. At the southernmost tip the Pacific and the Indian oceans meet. Tasmania is all mountains, valleys, and glens; with waterfalls and lakes, forests of fern trees, trout brooks, and hunting

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parks. Its coast is deeply indented with fiords and harbours, and the tourist bureaus have made it a great health resort. The whole country is spotted with boarding houses and hotels, and during the summer months, from December until May, it is swarming with visitors. One can go almost anywhere by motor, coach, horseback, or rail, and always have good company. There are also many tourists on foot.

Although more than twice the size of Belgium, Tasmania has only about two hundred thousand people, compared with Belgium's seven millions. Hobart, the capital and largest city on the island, has about fifty-two thousand. It lies on a fine harbour in a nest of hills on the banks of the Derwent. Back of the river rises a mountain, the rocks of which look like the pipes of an organ. The town is well laid out in checkerboard fashion; it runs up hill and down and here and there takes a jump out into the country.

I went from one end of the city to the other one day on a street car. The people of Hobart pride themselves on having the first electric railroad line in their latitude. The cars are not like any we have in the United States. They were made in England and look as though they had been pounded out by a crossroads blacksmith. They are enormous double-deckers, and their sides are plastered with advertisements. I rode on the roof right under a great steel bow, which, pressing against the overhead wire, takes the place of our trolley. I timed the trip and found we made speed only when going down hill. Most of the time our motion was a succession of spasmodic jerks, as though the electricity were afflicted with fits.

Near Hobart was Port Arthur, the chief penal colony

of the old Van Diemen's Land. Its site can be reached by a short sail down the Derwent River. Some of the convict buildings are still standing, and one can get a guide there who will describe the terrible punishments that drove many of the prisoners to suicide. They were flogged, tortured with dripping water, and loaded with heavy chains. They were kept in dark cells, were made to pull railway cars, and were subjected to all sorts of inhuman treatment. Many of the best families in Tasmania to-day are descendants of these convicts. Some of them will acknowledge their ancestry, but if one asks them the crime for which their forebears were transported each will invariably reply that it was for stealing a loaf of bread. It would have taken a good-sized bakehouse running steadily to supply the many loaves said to have been stolen by these early Tasmanians. Transportation of criminals ceased in 1853, and all the arrivals since then are people who have come of their own accord. To-day the number of crimes is no greater than in other parts of the Empire. Indeed, the Tasmania of to-day is rather pious than otherwise. The majority of the people are either immigrants or the descendants of immigrants from England. Ireland, Scotland, or Australia.

The Hobart museum is a Mecca to students of ethnology, for here is preserved the body of the last of the aborigines. When the island was a penal colony there were still a number of the original blacks, but they were so corrupted by escaped convicts that they became a menace to the whites. In 1830 a drive of three thousand Europeans was organized against them and all who survived were finally exiled to a dreary, windswept island in Bass Strait. Here their health suffered because they



Unlike continental Australia, Tasmania has a moist climate. This has given the island dense forests of eucalyptus and other woods which furnish railroad ties and paving blocks to her sister states.



Hobart, the capital of Tasmania, lies on the south coast of the island between the great hills on both sides of the Derwent River. Its harbour is second only to that of Sydney.



Fasmania deserves its name of the "Apple Isle," for it annually exports many shiploads of apples to the mainland and London. The orchardist often makes a profit of upwards of \$200 an acre.

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were forced to wear clothes, which they never took off, no matter how filthy they became. The poor creatures were also the easy prey of the sealers and escaped criminals that came now and then to their place of exile, and at the end of fifteen years only forty-four survived. A woman, Truganini, the last of the race, died at the age of seventy-three, in 1876. Her skeleton is in the museum and the scientists come here to study the skull. The native Tasmanians belonged to an even more backward race and stage of civilization than the aborigines of Australia.

The island state deserves its name of the "Apple Island." It is a voyage of more than a month by sea from Hobart to London, but apples are sent to England every year by the shipload in refrigerator steamers. The annual crop now amounts to more than two million bushels and brings in close to two and a half million dollars. It would surprise our orchardists to see how close the Tasmanians plant apple trees. They set them out ten feet apart, instead of twenty or forty feet, as with us, and I am told that as many as six hundred bushels are sometimes gathered from a single acre. The trees begin to bear in their third or fourth year and keep on bearing for twenty-five or thirty years.

Tasmania ships much green fruit to Australia. It raises quantities of pears, plums, cherries, and currants, and in recent years has been exporting several hundred thousand dollars' worth of jam, not only to the United Kingdom, but to South Africa, France, and even to the United States. By the law of the Commonwealth every jar of jam or marmalade exported must bear a label stating that it was made in Australia. Tasmania, which had built up a reputation for her preserves before the federa-

tion of the states, does not like this law, for it seems to give all the credit to Australia. The jam makers get around it by printing their labels with the word "Tasmania" in large letters and "Australia" in smaller letters.

These people are excellent farmers and their crops are usually good. The wheatfields cover only about twenty-two thousand acres, but the average production is more than eighteen bushels per acre, which is far ahead of the yield in the other Australian states. Large quantities of barley and oats are grown.

This island ranks with Vermont as a place for breeding fine sheep. It has many sheep worth upward of a thousand dollars apiece. They are sold to the mainland states and the countries of South America, pedigreed rams often bringing as much as five thousand dollars each. The land holdings are smaller than in Australia or New Zealand, so that the Tasmanian sheep breeders can therefore take better care of their stock. This is a great turnip country, and in this part of the world a good turnip country is a good sheep country. There are fields about Hobart that have produced as much as sixteen tons of turnips to the acre, and in northeastern Tasmania twenty-five tons have been grown on an acre.

Until 1872 the minerals of Tasmania were practically unknown, but in that year on Mount Bischoff, in the northwestern part of the island, tin mines were opened which have proved to be the largest tin mines of the world. They paid their first dividend in 1878, and are still yielding large profits.

Another big mineral property is that at Mount Lyell, which was discovered in 1881. It was first worked as a gold mine, but was afterward found to contain copper and

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silver. When these ores were smelted the results were so gratifying that the original company was reorganized with a capital of about four and a half million dollars, a railroad was built from the mines to the smelting works, and within a short time the company had five smelters treating eleven thousand tons of ore a month. This company paid its first dividend in 1807 and by the middle of the year following it had distributed more than a million dollars to its stockholders. It now pays out many thousands a year in salaries and wages and is making money right along from its copper.

I have made some inquiries about lands, both mineral and agricultural, and I find that all the best land has been taken up and that farms and city property bring almost as much as in the United States. For years one trouble with Tasmania was the fact that its lands were held in big blocks by rich men who would not sell. But now, under the closer settlement laws, the Minister of Lands may acquire, either compulsorily or by agreement, private land in any part of the island to be leased to settlers. The land taken over by the government is divided into farm allotments, the value of which may not exceed twenty thousand dollars. These are rented on ninety-nine-year leases. Unfortunately, the government is not yet rich enough to buy up many of the large estates.

One of the troubles about taking up government lands is the dense growth of timber which must be cut down before they can be used. The climate here is moist and the undergrowth is thicker than in most parts of our country. Much of the timber is eucalyptus, but there are also beeches, dogwoods, oaks, and other hard woods.

There are millions of acres of virgin forests, some of which are now being cut to furnish railway ties to other Australian states and to South Africa.

The cost of living is as high in Tasmania as in the other Australian states, but wages are lower. The best paid labourers are the skilled iron and electrical workers, and they get a maximum of only thirty dollars a week. As to clerks and bookkeepers, they are poorly paid, and there are few clerical positions open. Domestic servants are in demand and their wages are fair.

The Australians of the mainland seem to consider the people of Tasmania as slow as the New Yorkers do the Philadelphians. They have a saying: "Don't send a live man to Tasmania: send flowers." I have heard it said that the island used to be peopled by women, children, and graybeards; for as soon as the boys reached man's estate they crossed Bass Strait to Victoria or New South Wales. This, however, is no longer true; Tasmania is waking up. and its people think it has a big future as a manufacturing centre for all Australia. Its numerous lakes and rivers can furnish abundant water power at low cost and the development of its hydro-electric resources is going forward rapidly. All kinds of electrical appliances, which are regarded more or less as luxuries even in the large cities of the mainland, are conveniences of every-day life in many small towns of Tasmania.

The state government has already built a hydro-electric power station at Great Lake, about sixty miles north of Hobart. This delivers thirty thousand horse power to the Electrolytic Zinc Corporation, whose works are the largest of the kind in existence. It also supplies a big carbide-manufacturing plant as well as power for Hobart's



Thursday Island is the commercial centre for all Torres Strait. About its deep harbour has grown up a clean, well-regulated town, the home of representatives of all the peoples of the South Pacific.



The youngest of these island maidens has to go through several months more of suffering before she can appear with her complete blouse of tattooing. The design must be pricked in with a thorn driven under her skin



Experienced men claim they can tell by the appearance of the outside of certain oyster shells that they contain pearls. Natives are not allowed to open such finds, which are reserved for the white overseer.

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street cars and lighting system. Woollen mills, a big chocolate factory, and other industrial plants will get their power from this station. So will Launceston as soon as the transmission line from the lake to the northern city is completed. Launceston has its own power plant but this does not give sufficient current for its needs. Ultimately the capacity of the Great Lake power house will be raised to seventy-two thousand horse power. Other projects are planned, for Tasmania's hydro-electric resources are estimated at more than two hundred thousand horse power. There is even talk of transmitting some of the power from the island by cable to the mainland.

CHAPTER XXII

THE PEARL FISHERIES OF THURSDAY ISLAND

HE metropolis of the pearl-fishing industry of the Pacific Ocean is Thursday Island. It lies in Torres Strait off the north coast of Queensland and is part of that state. I visited it on my way to Java and the East Indies, but its story rightly belongs with that of Australia, and so I tell it here.

If you will turn to the map you will see that Torres Strait, which separates Australia from New Guinea, is spotted with islands. There are hundreds of them, some inhabited by strange tribes and others sparsely settled by Australians. There are islands for every day of the week, and when we came into the harbour of Thursday Island we were told we must go on to Friday Island for quarantine.

Thursday Island is scarcely more than a tiny speck in Torres Strait, but owing to its excellent harbour it is a port of call for ships on their way through the passage. All the steamers that go about north Australia to Europe stop here. There are also steamers for Japan, China, the Philippines, and other parts of Asia, as well as vessels bound for New Guinea and the islands of the South Seas.

The island has a military importance, as it commands Torres Strait and is one of the defences of the British possessions in this part of the world. The harbour is large enough and deep enough for the biggest warships; it

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has been strongly fortified and has also a coaling station.

Through its commerce and pearl fisheries a considerable town has grown up on the island. Two piers have been built out into the harbour for the accommodation of the smaller steamers, and back of these are the warehouses and stores. There are six hotels, three or four churches, and the large house of the governor, who is a Queensland official. This stands on a little hill at one end, not far from the barracks, great two-story buildings with galleries around them, looking not unlike one of our second-class summer hotels.

The port has one of the most mixed populations of this part of the world. I had no sooner stepped on the wharf than I was surrounded by representatives of all the peoples of the South Pacific. There were brown men. black men, and yellow men; Filipinos, Japanese, Chinese, East Indians, Fijians, Papuans, and Australian aborigines. There were pearl divers, beachcombers, bêche-demer fishermen, and adventurers of all colours and races. Thursday Island is a sort of Suez for an area of nearly twenty thousand square miles of island-sprinkled ocean between New Guinea and Australia. The town itself is far cleaner than many of its population, being quite free from epidemics, for the Oueensland government rigidly enforces the health regulations. Native councillors elected by the people must see that the villagers keep their houses, food, and clothing clean, that they go regularly to church, and that they send their children to school. These black officials strut about in red jerseys with the word "Councillor" in white letters across the front.

The chief interest in Thursday Island lies in its pearl

fisheries. Pearls and shells are the principal subjects of discussion, and the finding of a large pearl is talked of everywhere. The best pearl shells are taken from the coral islands and lagoons. The oysters grow to an enormous size, often having shells as big as a tin wash basin. The average weight of a pair of shells is about two pounds. The oysters lie on the bottom of the sea or cling to the coral rocks. They do not like sand or mud, and will not thrive where the tide shifts the bottom about. They grow largest where they can fasten themselves to coral formations. There are many caverns in the reefs, and the oysters attach themselves to the roofs of these submarine caves in clusters of a dozen or more. They cling to the rocks by a cartilage, or muscle, that extends out near the hinge of the shell, and then branches off into multitudinous threads, each of which glues itself to the rock.

Several years ago a perfect pearl, weighing thirty-two and a half grains and valued at five thousand dollars, was taken out of the Thursday Island grounds. But this was a rare find, indeed, for most of the money in getting pearl oysters comes from the shells and not from the occasional pearls within them. It is estimated that only one shell in a thousand contains a pearl. In a recent year the value of Australia's export of pearl shell was nearly two million dollars, while the value of the pearls shipped in the same year was only about one sixth as much.

Shell is cash at Thursday Island, and in the world's markets the better quality commands from five hundred to a thousand dollars a ton. It is used for making mother-of-pearl knife handles, buttons, and in all sorts of inlaid work. Trading vessels sail from island to island

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collecting the shell from the natives, in exchange for tobacco, calico, and other goods. The traders pay from sixty to one hundred dollars per ton for shell that will sell in London for about ten times as much.

The Japanese have almost monopolized the diving at Thursday Island, for they will stay longer under water and risk more than any one else. Among the divers are also many South Sea Islanders, besides Danes, Swedes, and Malays. The proprietors of the pearl ships say the Japanese are the best, and that the others often pretend to be sick.

The fishing is done by fleets consisting of one large boat, of, say, one hundred tons, and several smaller ones. The divers work from the small boats, each of which has a pump to supply them with air when they are under the surface. As even the small boats cost several thousand dollars each, the business takes considerable capital. The diver prepares for his plunge by slipping on over heavy flannels a diving suit to which ropes and air tubes are attached. He wears a metal helmet with circles of glass set in it so that he may see about him. His boots are soled with plates of copper or lead weighing about twenty-eight pounds to each foot, while the total weight of his equipment may be more than one hundred and fifty pounds.

When a diver goes down he takes with him a net bag, which he fills with shells. He then jerks the signal rope and is pulled up. The shells are counted and weighed, and he is paid according to what he has found. One diver has a record of having gathered one thousand pairs of shells in a day, but half this number is considered a good showing.

Even with the most modern equipment, one hundred

and eighty feet is considered the maximum depth at which divers can work safely, although some have gone to a depth of two hundred or more feet. As the shallower beds have given out, the divers have had to go deeper and deeper and Queensland has made a law forbidding diving below the safety level. But the state courts have held that a diver must actually be seen below that depth before violation of the statute can be proved, and, as the reefs are quite remote and supervision is virtually impossible, the men often take great risks. At one hundred feet below the surface the pressure is sixty pounds to the square inch, and it increases as the diver goes deeper. At a certain depth he is attacked by pains in his muscles and joints, deafness and spells of fainting, and a kind of paralysis called "diver's palsy." If he is brought too quickly to the surface the sudden removal of the pressure may cause profuse bleeding or even death. Every year ten per cent. of the Torres Strait divers die from the immediate effects of their calling.

I am told that the profession has other great dangers. The Strait swarms with tiger sharks, which here grow to a length of twenty feet. They follow the pearl luggers, attracted by the pieces of salt beef now and then thrown from the boats. Unless very hungry, they trouble only the naked divers and the man in a suit can open an aircock and make enough bubbles to frighten them away. When the naked diver is attacked by a shark he stirs up the water and thus often confuses his enemy so that he gets back alive, although he may perhaps be maimed for life by the teeth of the terrible fish. As a rule the divers are not afraid of the sharks, but they do not spear fish at the bottom of the sea without first ascertaining whether there

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are sharks about, for the dead fish would surely draw them.

Another terror is the great squid. This marine monster fastens its long tentacles upon anything within its reach. If disturbed it vomits an inky fluid which discolours the waters about, and the diver, bewildered in the gloom, is liable to fall against the rocks and be caught.

In the native pearl fisheries much of the diving is done by women, who go down without suits. They fasten stones to their feet to enable them to sink, but do not plug up their nostrils and ears as do the pearl divers of India. Most of them can stay under water only a few seconds more than a minute, and they cannot work in such deep waters as the men in diving dress.

Pearls worth one hundred dollars are quite common and a big one. lately discovered, sold for twenty-five hundred dollars. Since an oyster may contain a thousand-dollar pearl, and the pearls are so small they can be easily stolen, the opening of the shells is carefully watched. A knife much like a common table knife, with a thin, flexible blade and a stong handle, is used. A good operator can open a ton of shells in a day and not miss a pearl. The shells containing the pearls have sometimes a curious appearance so that experts can tell before they are opened that they have pearls in them. Such shells are always laid aside to be handled by the proprietor or the foreman of the sloop.

Sometimes one oyster will contain a dozen small pearls and even more. Such oysters are often diseased and their shells are rough, but on the other hand a perfectly healthy oyster may contain a fine round pearl of large size. Many people believe that some irritating substance is the cause of every pearl. Looked at through a microscope, a

pearl cut in two shows concentric layers like an onion with a hole, or sometimes a grain of sand in the centre. It is supposed that the grain of sand irritates the oyster so that it exudes carbonate of lime, coating the scratchy particle over and over until there has been formed a smooth round ball that does not hurt.



The islands about Torres Strait are probably volcanic fragments of the immense continent supposed once to have connected Asia and Australia. Only the larger ones are inhabited.



The natives' community house is in the centre of most South Sea island villages. All discussions, feasts, and gatherings are held here, the traveller is free to use it, and the peddler finds it at once a hotel and show room.

CHAPTER XXIII

AUSTRALIA'S ISLAND WARDS

OST people associate Thursday Island with its great neighbour New Guinea, the second largest island on the globe. Of what we might call mainland New Guinea I have already written in my book on Java and the East Indies. You will recall that it is divided into Dutch New Guinea, Papua, and former Kaiser Wilhelm's Land. Both Papua and the former German possessions are now administered by Australia. Besides former Kaiser Wilhelm's Land, the Territory of New Guinea embraces the Bismarck Archipelago and some of the Solomon Islands. Germany owned also the Marshall and the Caroline Islands, lying north of the Equator, which are now governed by Japan, while former German Samoa is under the jurisdiction of New Zealand. Australia has the responsibility of looking after nearly one hundred thousand square miles of territory outside the Commonwealth, and although she is determined to remain an "all-white" continent, she has under her jurisdiction thousands of primitive coloured peoples.

The natives of former Kaiser Wilhelm's Land are, if anything, wilder and more savage than those of Papua. Thousands of them go naked save for breech cloths of bark for the men and short petticoats of woven grass for the women. Along the extreme northern coast are tribes that are entirely nude, with the exception of a shell neck-

lace and a few bird-of-paradise feathers stuck in their woolly hair. Some tribes paint themselves in stripes of white, red, yellow, and black, and others scar themselves with flints or by fire.

I have photographs of native houses recently taken in New Guinea. Some of these houses are of great size, and many families live under one roof. The buildings are frequently set upon piles, a platform of poles being first constructed, a skeleton framework built upon this, and mats of woven leaves or grass fastened to it. The mats are so arranged that they can be raised or lowered to keep out the mosquitoes and the flies, which are exceedingly troublesome. In other parts of the island there are houses built in the trees, to which the people retreat in times of danger.

The different tribes are frequently at war with one another, and the missionaries tell me that sometimes these feuds go on between tribes and villages for generations. Cannibalism exists in some localities, though not to a great extent. The British have observed it among the people along the Gulf of Papua, and it is found also in northern New Guinea. The ordinary food of the natives is about the same as that of the Samoans, their chief diet being the yam, the taro, which is a kind of potato, and the banana.

The islands of the Bismarck Archipelago have some tribes stranger even than those of New Guinea. On one of them, according to good authorities, the girls are kept in wicker cages from the age of six or eight years until they are married. The cages are built inside large houses set aside for the purpose. The girls are let out once a day to bathe, but otherwise they are not permitted to leave their traps. Their food is handed in through the bars, and they

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pace up and down at times like caged lions. These cages are under the charge of the old women of the tribe, who see that the girls do not flirt with the passers-by or peepersin. The young men have the right to look at the cages now and then, and probably, after making proper presents to the guards and the parents of the girl, one may woo the maiden of his choice through the bamboo meshes.

I am told that these girls do not suffer in health from their imprisonment, and that notwithstanding their seclusion they make very good wives, and later on are by no means averse to having their daughters caged up as they were. In this hot climate the people mature rapidly, and the marriageable age for a girl is eleven or twelve years. The unmarried damsel of fifteen is considered an old maid.

New Britain, the principal island of this group, is three hundred and fifty miles long. New Ireland, the next in size, is about two hundred miles long and only twenty miles wide. New Britain is traversed by a mountain chain whose tallest peak is The Father. It is seventy-five hundred feet high and is an active volcano.

In New Ireland the people of each village are divided into two classes and marriage between the classes is strictly forbidden. If a woman marries outside her class the punishment is death, but the male offender merely pays a fine. Both women and men go naked, and cannibalism is common. The people live in small huts shaped like beehives, surrounded by bamboo fences. The young unmarried men have common houses where they live together.

Most of the few hundred Europeans living in the Archipelago are gathered at Rabaul, in New Britain. This is a well-planned, spick-and-span town, once the capital of German New Guinea. Here one of the most interesting

characters of the Pacific islands had her headquarters. This was a woman of remarkable courage and business ability, half Samoan, who back in the eighties started German New Guinea on the road to prosperity in the coconut business. "Queen Emma," as she was called, was a most enterprising trader, and it was from her that the German New Guinea Development Company, in which the former Kaiser was said to be a heavy investor, bought trading rights. The enormous areas under her management were finally forbidden to German officers because of their cruelty to the natives, whom Queen Emma always championed. She was almost worshipped by the islanders, of whom she employed thousands. At length, however, she married a handsome young German officer and went to Europe to take a high place in the society of Berlin. She died several years ago at Monte Carlo.

New Ireland, too, has its romance, for it was here that some forty years ago a wealthy Frenchman, the Marquis de Rays, tried to start the Free Colony of Oceania. his prospectus New Ireland was described as an earthly paradise in which each settler was to have fifty acres with a house and every comfort. Would-be colonists from the crowded lands and streets of France, Belgium, and Italy were numerous. Money was poured into the enterprise, which, however, suffered from mismanagement and poor organization. Arrived at the spot chosen on the unsheltered southeast point of the island, the colonists' ship dumped its cargo on the open beach. Steam cranes. sugar-mill machinery, handsome carriages, agricultural implements, bricks, crates of food, and immense piles of clothing lay in confusion under the tropical sun. Boxes of handles for shovels and axes were landed, but neither



Among some Pacific island men a big waist is considered the sign of a glutton, so they lace themselves in tightly with belts of fibre. This man, owing to his necklaces, looped earrings, and unusual nose plugs, is the envy of his village.



The Tasman Sea is named for Abel Tasman, greatest of all Dutch navigators. He discovered, also, New Zealand and Tasmania and was the first man to circumnavigate Australia.



At Wellington, capital and chief port of New Zealand, the hills come so close to the water that some of the streets run through tunnels and many of the houses are seven hundred feet up.

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shovels nor axes could be found to go with them. There were stacks of wheelbarrows without wheels. Much of the clothing was heavy and unsuited to the climate. The only thing entirely complete to the last detail was the building material for a cathedral, a gift to the settlers from the French people! It was never put up.

Many of the intending colonists did not even leave the ship. Some died of malaria, for quinine had been left out of the medical stores. The rest of them scattered, a number going on to Australia. Only one, a mere boy, decided to stay on, and he at last grew to be one of the wealthiest men of New Guinea.

A little to the east of the Bismarck Archipelago are the Solomon Islands. The principal island in this group is Bougainville, which is bigger than Porto Rico. It is quite rugged, having two constantly active volcanoes and one mountain of an altitude of more than two miles above sea level. The natives here are of the same race as those on the adjoining islands, and equally as savage. In most cases the men go naked, and in some of the islands the women wear no clothing until they are married. Both men and women pierce their ears, the holes in the lobes being gradually stretched until they are as big around as a napkin ring. Among some tribes the nose is pierced and a long pin of bone or shell is stuck through it. There is some tattooing, and scars made by burning are considered fine ornaments.

The Solomon Islanders are barely out of cannibalism, and head-hunting was not long ago the profession and pleasure of most of the young men. Polygamy is practised, and some of the chiefs have as many as a hundred wives. The islanders do some farming, raising bananas,

yams, and taro. They are good fishermen, and gather shells and pearls for sale.

Coconuts are the chief product of the Solomon Islands, although it has been proved that rubber, sugar cane, and cotton will flourish there. But expansion of the plantations cannot be undertaken without a large supply of labour.

Australia has introduced fairer labour conditions than she found throughout the islands she now administers. Special ordinances provide for a ten-hour day, a weekly day of rest, and observance of public holidays. Board, lodging, and medical attendance are free and minimum and maximum wages have been prescribed. There is neither slavery nor forced labour, and the recruiting of native labour is strictly regulated.

Missionaries, especially those of the Methodist Church, are at work in all the islands. Their faithful labour has gone on for many years, and there are now a large number of native evangelists. One of the missionaries tells me that the people are being slowly but surely civilized, and that a number of them are Christians.

CHAPTER XXIV

ACROSS THE TASMAN SEA TO WELLINGTON

CAME from Australia to Wellington, the capital of New Zealand, on a vessel as well furnished, as well kept, and as well managed as any of the floating palaces that steam on our Great Lakes. But the voyage was far from being as smooth as a sail on the Lakes. The South Pacific Ocean is much like the North Atlantic. It is wild and stormy at times, and I found it a great contrast to the calm waters of the tropics through which I had passed on my way to Australia. The clear skies of the Equator and their golden stars had disappeared, and in their place were heavens plated with lead and heavy, low-hanging clouds full of wind.

How the steamer rolled! There were ladder-like racks on the table to hold the dishes at every meal, and we had to lift our soup plates to our chins, balancing the steaming liquid to the movement of the boat. One night a buxom young lady, who was strikingly décolleté, sat opposite me at the table. The ship gave a sudden lurch and her soup went down—outside. Another girl lost her coffee in my lap. In my cabin it made me almost seasick to watch my pajamas swing violently to and fro on their hooks. As I walked the deck I had to bend this way and that to keep my balance, and when I sat down the steward tied my chair to the rail outside the saloon wall to keep me from sliding down to the edge of the boat. The spray dashed

over everything, and, as a New Zealand girl said, "It was really na-a-hsty!"

Still, the southern ocean is grand. Stand on deck beside me and take a look at a storm off the coast of New Zealand. The green water of the shallow sea rolls toward us in vast waves. It is a seething, boiling mass. Our steamer mounts sea-green hills spotted with foam, and plunges down into valleys blanketed with white. Great billows chase one another like racehorses over the roads of the sea. They roar as they run with a noise like the thunder of a thousand Niagaras.

Now two waves meet. The foam dashes up in a spray and turns to rainbows in the sun, which now and then breaks through the clouds. The rainbows are so close that we can almost wash our fingers in them. They come and they go, a hundred different rainbows in as many minutes. They dance in and dance out. They ride for a moment on the crests of the waters, only to shine, disappear, and give place to others. How the ship struggles and groans! Every now and then a mist closes down upon us, and our foghorn blows continually. We are hours in making a few miles and are tossed about all night by the storm.

I suppose there is not much chance that the Tasman Sea will change its ways, but it has been proposed to change its name. After the World War it was suggested that it be re-christened the "Anzac Sea" in honour of the troops sent from this part of the world to fight with the Allies. You remember that their organization was officially known as the Australia-New Zealand Army Corps. The supplies sent to the first contingent at Gallipoli were marked with the initial letters: A. N. Z. A. C. and thus

ACROSS THE TASMAN SEA TO WELLINGTON

the "Anzacs" got their name. Anzac Day, April 25th, is now observed as a national holiday in New Zealand in memory of those who gave their lives at Gallipoli, and in Palestine, Egypt, and France. The day is kept more like a Sunday than as an ordinary holiday, and the use of the word "Anzac" for trade purposes is prohibited by law. I am told that some people even disapprove of its being used as a geographical term.

The morning was clear when we sailed into Wellington harbour and cast anchor before the capital city of the island dominion. On going ashore I found Wellington rather like an American than a British town. It has more than one hundred thousand people and is growing like a green bay tree. The city lies in a nest in the hills, with its business streets round the harbour, some of them built upon land reclaimed from the sea. The houses are mostly of wood, and one of the government buildings is said to be the biggest wooden structure in the world. The wharves are of wood, but they are big enough to accommodate the largest steamers, and the water is so deep that ships come close to the shore and anchor within a stone's throw of the post-office.

Both Wellington and Auckland, the chief ports of New Zealand, have fine harbours, although neither is as good as the one at Sydney. The New Zealanders say that when they go to Sydney they pin a tag on their coats, reading: "Yes, I am pleased with your harbour," and thus avoid answering the same question twenty times an hour. Wellington is as windy as Chicago, and Australians say they can always tell a man from Wellington because, no matter where he may be, every time he turns a street corner he grabs his hat to keep it from blowing away.

The stores here are not unlike ours. Their windows are well dressed and their goods attractively displayed. In the business section there are roofs of corrugated iron built out over the sidewalks so that shoppers are protected from the sun or rain in going from store to store. The merchants carry large stocks, and seem to be prosperous. There are many jewellery stores, book stores, and millinery shops. The butcher shops are walled and floored with tiles, and the beef and mutton sold in them are equal to any you can get in Chicago or London, and much cheaper. The grocery stores are clean and up to date, while the displays on the fruit stands make my mouth water. They have home-grown apples and grapes, and tropical fruits of all kinds from the Tonga Islands and the Fijis.

The city is lighted by electricity. It has a good water supply and a municipally owned street-car system, one line of which runs through a tunnel under a mountain and out to a popular bathing beach. Wellington has gone far ahead of our cities in municipal ownership. Besides its street-car system, it owns its water supply and drainage works, its cemeteries, baths, and slaughter houses. Many of its homes are lighted from a municipal central station, and it has a monopoly on the local milk business. The city buys and distributes all the milk produced within a radius of about twenty-five miles. Any surplus is made into butter and cheese, and an ice plant is operated in connection with the dairy business.

I have been told that the reason for the number of wooden buildings here is the fact that years ago a severe earthquake did great damage and made the people afraid to put up high structures of brick and steel. But the Wellingtonians of to-day laugh at the idea of another

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earthquake, and substantial buildings are going up all over the city. A big new Parliament House is about completed, and the government is carrying out a large construction programme for the better housing of its various offices. One of the finest buildings in the Dominion is the home of the mail and the telegraph services—a structure of native stone covering half a block.

CHAPTER XXV

THE DOMINION OF NEW ZEALAND

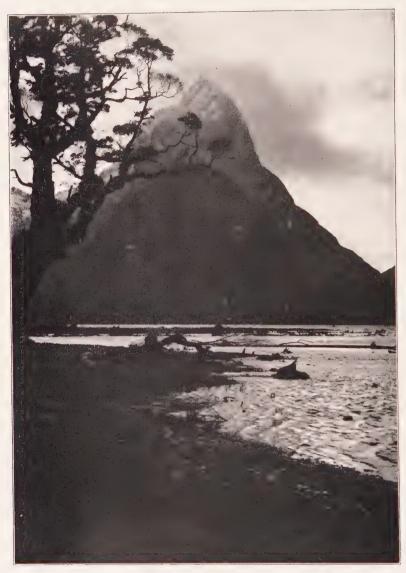
N THE map New Zealand looks like a little stepdaughter of Australia, and most of us think of the two countries as near neighbours. We associate them in our minds as belonging together, and imagine that the trip from one to the other is no more than a week-end journey.

This is all wrong. New Zealand is twelve hundred miles from Australia. It is a separate dominion of the British Empire, and entirely independent of the Commonwealth. The voyage from Sydney to Wellington takes four days, or almost the time of the fastest crossing of the Atlantic from New York. The two countries are as unlike in climate as South Carolina and Norway. The northern tip of Australia is nearer the Equator than Florida, while the southernmost island of New Zealand is in the relative position of Portland, Oregon.

New Zealand is a land of lofty mountains, geysers, volcanoes, rivers, fiords, and glaciers. Australia has no geysers, glaciers, or volcanoes; her mountains are not high, she has but few rivers, and the heart of the country is a vast desert. New Zealand has seventeen ports with harbours deep enough to accommodate ocean-going vessels; Australia's seven largest ports have comparatively shallow harbours, which have required much dredging. Australia has more than three hundred and ninety species of



New Zealand is one of the most remarkable botanical regions of the world and nowhere are there more beautiful forests. The giant fern is so common that it is the emblem of the country.



The southwest coast of the South Island rivals both Norway and Switzerland in its scenic beauty. There the glaciers have made fourteen great sounds, walled with steep cliffs and lofty mountain peaks.

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lizards and a hundred different kinds of snakes, most of them poisonous. New Zealand has no snakes of any kind. The aborigines of Australia are among the most primitive peoples of the world, but the Maoris, the natives of New Zealand, are able to take a part in the government of their country.

Yet there are also many points of likeness between these two South Sea members of the British Empire, especially in their forms of government. Each country has a Governor-General appointed by the British Crown and each has a Parliament of two houses. In both the executive power is in the hands of a ministry, that is, the leaders of the majority parties in the Parliaments. Each maintains a separate tariff against Great Britain and neither tolerates the least interference of the Crown in its domestic affairs, though both are consulted by Great Britain on matters affecting the British Empire. Furthermore, both Australia and New Zealand are the scenes of all sorts of experiments in government ownership and control and each is noted for its liberal labour laws. The New Zealand government owns the railroads, the telegraphs, and the telephones; it competes with private companies in the insurance business, owns and operates the coal mines on the public lands, and undertakes all water-power developments.

To most of us New Zealand is an empty land in a fardistant part of the globe. I find it filled with a busy people and moving rapidly along on the lightning express of civilization. Neither is it so far away, after all. It is now only eighteen days from San Francisco, only about thirtyfive days from London, and good steamship lines connect it with all parts of the globe. From the New Zealand ports

there are regular sailings to London by way of the Cape of Good Hope, by the Suez Canal, or the Panama Canal. Still another route to Europe is across the Pacific from Auckland to Vancouver, a voyage of more than six thousand miles; thence by rail to Montreal, Quebec, or New York, and then across the Atlantic. Scores of steamers go from port to port along the wild New Zealand coast, and one can leave here almost any week for the Tongas, the Fijis, and other islands of the South Seas.

The Dominion of New Zealand is made up of three islands. As they lie on the map they form a great boot turned upside down with its toe toward Australia and with the ankle broken by Cook Strait. The foot is the North Island, on which are situated Auckland and Wellington, the two biggest cities. The South Island, which contains the highest mountains and some of the best agricultural areas, forms the leg, and Stewart Island, the little patch of land at the bottom, makes the loop at the end of the boot strap.

The total length of the boot is one thousand miles, or more than the distance from New York to Chicago. At its broadest part it is about as wide as from New York to Boston. The North Island is nearly as big as Pennsylvania, and the South Island is larger than Illinois. Stewart Island is about half the size of Rhode Island. It is mountainous, and although it supports a few sheep, it is chiefly a summer resort. The combined area of these three islands and some smaller ones adjoining is a little more than that of Colorado. In 1901 New Zealand annexed the Cook Islands, and under a mandate from the League of Nations it now administers former German Samoa.

THE DOMINION OF NEW ZEALAND

The New Zealand in which we are interested consists of the two large islands. They contain all the cities, almost all the people, and everything that makes the Dominion the live, wide-awake, prosperous country that it is to-day.

The climate here is warmer than that of New England. It is moist and rainy. January and February are the hottest months and July and August the coldest. On the North Island snow falls only on the mountains and high hills and is practically unknown in Wellington and Auckland. On the South Island there is a good deal of snow south of Christchurch.

A large part of the North Island is hilly and some of its plains are covered with pumice sand, which unfits them for tillage or pasturage. One part of it has hot springs and geysers like those of Yellowstone Park. It has several volcanoes, although they are mostly inactive now. Ngauruhoe, the youngest, continually sends up little clouds of steam. The Ruapehu volcano, which is nine thousand feet high, has glaciers on its upper slopes, and ends in a hot crater lake, which is often covered with steam. White Island, in the Bay of Plenty, is a vast bed of piping hot sulphur. On days when the sea is calm a person may land on its rocky shore, but walking about it is not pleasant, for the crusty ground breaks under his feet and the sulphur eats up the soles of his shoes and his clothes if it touches them.

Mount Egmont, near the southwest coast of the North Island, reminds me much of Fuji-yama, Japan. It is a perfect cone, eighty-three hundred feet high, or more than two thousand feet higher than Mount Washington. It is thirty miles in diameter at the base. At its foot lies New

Plymouth, a town of about eleven thousand people. Mount Egmont rises out of one of the most fertile districts of New Zealand. The soil is a rich loam, so good for grass that it has sold for four hundred dollars an acre. It is used for dairying, the butter being exported to Great Britain and the United States.

Like the Tasmanians, the New Zealanders call their country the Switzerland of the Pacific, and the mountains of the South Island are named the Southern Alps. They reach a height of more than twelve thousand feet in Mount Cook, which the native Maoris call "Aorangi," or the "cloud piercer." The snow line is lower than in Switzerland, and the people here say that the scenery surpasses that of the European Alps. Many of the New Zealand peaks are covered with perpetual snow, and there are great glaciers on both sides of the range, descending in places to within a few feet of sea level. Some of the peaks have never been climbed and many glaciers are still unnamed. Some of the latter are of enormous extent. The Tasman Glacier is eighteen miles long, two thousand feet thick, and in places three miles wide. It covers an area of three thousand acres. Both the Murchison Glacier and the Godley Glacier are ten miles long and each has an area of more than five thousand acres.

The southwest coast of the South Island is bitten into by fourteen deep sounds hollowed out by the glaciers of ages past. The most beautiful of all is Milford Sound. It is surrounded by lofty cliffs and mountains about whose heads float wreaths of mist and down whose sides silvery cascades plunge into the sea. Milford Track, which the New Zealanders call the "most beautiful walk in the world," leads from the Sound for twenty-six miles through

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forests, mountains, and valleys to Te Anau, the second largest lake in the Dominion.

The largest lake is Taupo, in the centre of the North Island. It is surrounded by mountains capped with perpetual snow, and in flood times a magnificent waterfall thunders down into it from the sheer cliffs on its western side.

In summer the New Zealand mountains are full of travellers and explorers from all over the world. The tourist agents of Europe send parties and the people of the Old World come to this Switzerland of the South Seas just as we go to the Switzerland of Europe. The New Zealand government, which is the chief excursion bureau, has a department devoted to exploiting the scenery. It prints illustrated guide books, which it gives away or sells at cost. The government builds roads and bridges through the most picturesque parts. It maintains a series of rest houses along Milford Track, and operates the hot-springs district as a tourist resort.

New Zealand is an evergreen land, as the leaves stay on most of the trees all the year round. Here is the same green that one sees in England and Ireland; for, like the mother country, the Dominion has an abundant rainfall. The fences about the houses are often hedges with leaves of a varnished green. There are many varieties of evergreen plants, such as the holly. The New Zealand palm lily is to be seen everywhere. It grows to a height of twenty feet without a branch, and then its top blossoms out in green tassels like a palm. The people call it the cabbage tree.

And then the ferns! New Zealand has enough to establish ferneries for all creation. There are acres of them,

miles of them! Some of the deep glens and gorges are walled with ferns. They are of all kinds, some like great trees and others as fine as the maidenhair. There is one plant, half fern and half vine, which is used by the natives for bedding. This is the "supplejack," which climbs the loftiest trees, coiling its wire-like stems about the branches. The runners are so tough that they can be used for ropes. They maintain their coil after being pulled from a tree, and are said to have been used for making spring mattresses. Think of sleeping on fern beds, upon fern springs, and you have one of the possibilities of New Zealand.

Both the North Island and the South Island have much good land. I visited a farm on the Canterbury Plains in the South Island which a good authority tells me has produced ninety bushels of wheat to the acre, and I have travelled through sections where thirty, forty, and fifty bushels are not uncommon. Some of the land produces a hundred bushels of oats to the acre and much of it yields turnips by the ton. There are millions of acres sown with English grasses. In northern New Zealand, swamp areas once considered worthless have been drained and now form some of the richest land in the Dominion. On the whole, New Zealand comes as near being a rich and beautiful garden as any country with a temperate climate lying south of the Equator.

As for the people, they are enthusiasts about their country. They believe in New Zealand for the New Zealanders. It is estimated that the Dominion could accommodate perhaps four times its present population of a million and a quarter, but I doubt whether away down in their souls the inhabitants really want immigration. Certainly the government has put no premium upon it.

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Even British subjects wishing to go out to New Zealand must be nominated for admission by a resident of the Dominion before they can get their transportation at the reduced rates sometimes offered. The government is especially anxious to keep out the Chinese, and limits the number admitted, each of whom has to pay a tax of five hundred dollars. The result is that there are now less than three thousand Chinese in the country, and practically no Japanese.

Of the more than a million population only forty thousand are Maoris or aborigines. The remainder are nearly all British-born subjects, more than half of whom were born in New Zealand. The rest have come from England, Scotland, or Ireland. The Dominion is in fact a little Britain. The houses are much like English cottages, the business places are like English shops, and the money is in pounds, shillings, and pence. The language is English and I sometimes hear the cockney accent of London. The people are, I think, far more progressive and less provincial than the inhabitants of Great Britain, and they seem to me much more like the nephews of Uncle Sam than the sons of John Bull.

CHAPTER XXVI

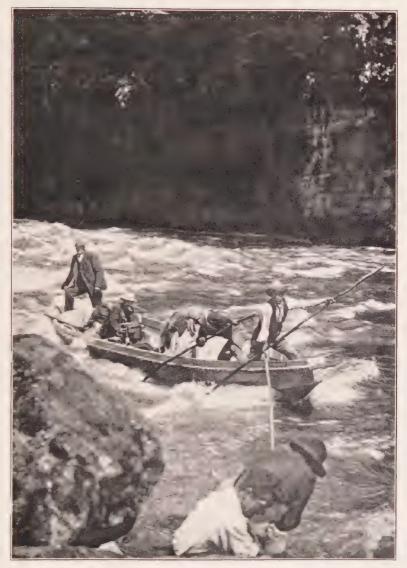
"SOCIAL PESTS"

HILE other countries have talked about land reform or their peasants have staged revolutions to get farms of their own, New Zealand has quietly gone ahead and put through a system of land ownership and taxation which in the United States would be called socialistic.

What would our people say, for example, if Congress should pass laws carrying out a land policy such as was explained to me by one of the national leaders of New Zealand? He said:

"We do not look upon land as like other property. Land should belong to the state. It is given to it by the Lord, to be held in trust for the people. It is all right for a man to own the improvements he makes and to be allowed to sell them or leave them to his descendants; but as to the land itself I don't think God ever intended any one man to own vast tracts and be able to hand on the property to his descendants through generation after generation.

"As the trustee of the people the government has no more right to sell large tracts of land than it has to give them away. The ideal method would be for the government to own all the land and lease it, and that is what we some day hope to accomplish here. As it is now, I think we have blasted the ambitions of those



New Zealand has abundant water power, much of which is still undeveloped. The government has selected seventy-odd sites for hydroelectric projects and has a big programme under way.



The big land problem was getting the immense sheep blocks held by a few cut up into smaller areas for general farming. The government has the right to condemn land for closer settlement.



New Zealand has experienced some terrible volcanic eruptions. In one the top of Mt. Tarawera was blown off, with an explosion heard five hundred miles away, and surrounding villages were buried sixty feet deep in mud.

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who dreamed of building up great estates as family inheritances."

It does not seem likely that the government will ever own all the land in New Zealand, but it holds enough to control the situation, and it stands ready to take more whenever it thinks it necessary. What the people are after is to make their country one of small farms, and they are opposed to large holdings by any person or corporation. They call the big landowner a "social pest," and have not hesitated to strip him of a part, at least, of his possessions. Lands taken from the big proprietors have been cut up and sold to settlers, whom the government helps and encourages quite as much as it discourages the owners of vast tracts.

Indeed, the lot of the large landowner in New Zealand is not a happy one. His lands are at the mercy of the government, which can force him to sell at any time. The more land he owns, the higher his tax rate. If he does not live in New Zealand, his taxes are automatically increased by fifty per cent.

The development of land policies aimed at the larger owners is comparatively recent, and entirely contrary to the theories of the men who established the first colonies here. The story of how the system came to be changed, as I have learned it in talking with some of the highest officials in the Dominion, is most interesting. It all goes back to the very beginnings of the country.

Before the year 1840 considerable effort had been made to induce the British government to colonize the islands of New Zealand. But the imperial authorities were always busy with other things and, besides, they pointed to Australia, a whole continent with plenty of

room for British settlers. The leaders of the colonization movement replied that Australia was for many reasons unsuited to their purposes. They wanted to establish a colony of British farmers with ideals and conditions like those of old England. The climate of Australia, they said, was unfavourable to this scheme, there was little place for English farming methods there, and finally, they thought the convicts sent to Australia made it an undesirable country for their plans.

At last they organized a colonizing corporation called the New Zealand Company. The plan was to set up landlords in the new country, with tenant farmers to work their estates. Members of old British county families with sufficient capital were invited to join and they, in turn, induced sons of the family tenants to go out with them. A system of grazing "runs," as they were called, soon sprang up and were found to pay well, for large numbers of sheep and cattle could be pastured on the grass lands all the year round at small expense. Much of the land was bought at very low prices by men who never went to New Zealand. One man, for instance, paid two dollars and a half an acre for fifty thousand acres now worth one hundred dollars an acre. Others purchased tracts of twenty thousand, fifty thousand, or even two hundred thousand acres

For the most part these great holdings lay idle, while their absentee owners waited for the land to increase in value. Sometimes they used their vast acreage for grazing sheep, having perhaps a dozen shepherds on a principality that should have supported several thousand farmers. There was a sort of craze for big farms, and individuals and groups took up all the lands they could

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get. The unfederated states of the New Zealand of that day had no common policies, and sold off their lands indiscriminately to any who would buy them, in order to raise money to build railroads or meet other expenses.

Often lands were held by English syndicates, whose managers squeezed the tenants in every possible way to increase dividends. It was stated in the New Zealand Parliament that the manager of one of these absentee land companies had made a speech to his directors in London, apologizing because he could declare a dividend and bonus of only fifteen per cent. at that time, and saying that the shareholders must not look for bigger profits until wages in New Zealand were reduced. The tenants were charged such high rents that there was no money in farming. The small holdings were mortgaged so that the farm owner paid as much interest as the tenants did rent, and most of the money from both was going to England.

Feeble efforts to tax the big farms out of existence did not prove successful. The landholders could pay high taxes and still make fine profits on their huge sheep and cattle pastures. They held tight to their acres, New Zealand lost favour with intending settlers, and even those who had come in began to sell out and leave the country, moving across to New South Wales and Victoria.

Such were the conditions that faced New Zealand's greatest premier, Richard Seddon, or "King Dick," when he came into power. Richard Seddon was a man of the people. Born in England, the son of a Lancashire farmer, he learned the trade of an engineer, and when, as a boy, he first came to Australia, he worked in the railroad shops. Later he went to the goldfields at Bendigo, and there

swung a pick in the mines. Throughout the rest of his life some of his friends called him "Digger Dick." After three years he came to New Zealand to try his luck in the goldfields of the west coast. It was there he first engaged in politics. He was elected mayor of his town and in 1879 was sent to the New Zealand Parliament, in which he held a seat until his death twenty-seven years later. For thirteen years of that time he was leader of Parliament, and therefore the prime minister of the country.

Seddon was a great, deep-chested, hearty sort of a man, with a jovial manner, a jolly laugh, an amazing memory for faces, and a gift for handling people, especially those of the class from which he came. He had tremendous force and driving power, and while he was in office he put through a great many laws in the interest of the working man.

One of the first big questions he tackled was the land problem, which he felt was responsible for the hard times from which New Zealand was then suffering. His solution was a new land law, which provided chiefly that the government should have the right to buy any lands in the Dominion for the purpose of re-dividing them for sale to settlers. In case an owner refused to sell, or held out for an exorbitant price, the government could condemn the lands and take them over at a fair price. Under this law, which is still in force, the Minister of Lands may at any time notify a proprietor in writing that his land or a portion thereof is required for purposes of settlement. Within six months the owner must tell the Minister whether he will enter into an agreement with the government for its subdivision and disposal, or whether it shall



The government conducts four big experiment farms and in the laboratories at Wellington tests seeds and fertilizers for the farmers. This is a crop of rust-resisting oats on a government farm.



Believing that the future of the country depends chiefly on agriculture, the New Zealand government offers every inducement to settlers to take up unimproved land and clear it for cultivation.

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be taken compulsorily under the Land for Settlements Act.

In talking with officials as to just how this law worked, I asked them to give me a typical case. Here is the story of what happened when the government took over the bulk of an estate of more than eighty thousand acres. The tract belonged to a man who had bought a large part of it more than half a century before, paying about one dollar an acre. Much of it was rich farm land, but it was being used mostly for sheep raising. For tax purposes, the land had been valued at a million and a half, which the owner claimed was two hundred thousand dollars too high. When the authorities wanted to buy his land for settlers, he refused to sell an acre, and the government thereupon took possession.

The question of the value of the property was referred to the Court of Assessment. The owner was finally allowed to retain the homestead and a reasonable amount of the land adjoining, and the government was empowered to take the rest, paying the owner the amount of the assessed valuation. The land officials then resurveyed the estate and divided it into farms of three hundred and twenty acres or less. They laid out a town site and three village sites and built a railroad across the property. They spent about three hundred thousand dollars in developing the tract before opening it up to settlers.

The lands were rapidly taken on the usual government terms, and at the end of six years, instead of being a big sheep run, the estate was made up of productive small farms. Land formerly used for grazing was yielding forty-five bushels of wheat to the acre and there were eleven thousand acres of it in English grass. Under in-

tensive cultivation more wool and mutton were being shipped from the estate than when it was all devoted to sheep. In the neighbourhood of fifty thousand sheep and lambs were exported from it annually. When the government took that estate the employees upon it numbered something like a score. Under the new arrangement the same area supported more than twelve hundred people and was spotted with pretty farm homes and school houses.

Within twenty years after Seddon came into power the number of farms in New Zealand had doubled and the population had grown from six hundred and thirty-four thousand to more than a million. As Seddon once said, "land formerly used to raise only sheep was turned to raising men."

Though the government had arbitrary power to take almost any lands it wanted, the number of forced sales was not very large. The presence of the law on the statute books and the realization that the government meant business resulted in offers of great tracts of land for sale. Almost every year nearly twice as much land was offered to the government as it was prepared to buy, and it was thus able to pick and choose such lands as were best suited by location and quality for settlement. Usually, also, there were more applicants for land than there were farms available for sale, so that the government was in position to award the lands to those who seemed most likely to make successful farmers.

Under the present laws an applicant may take up land with the right to purchase on a renewable lease. He must be at least seventeen years of age, and must want the land solely for his own use. Including the land for which he

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makes application, he must not own anywhere in New Zealand more than five thousand acres. For allotment purposes, every acre of first-class land is counted as seven and a half acres; every acre of second-class land as two and a half acres, and every acre of third-class land as one acre. No applicant is allotted more land than the officials think he can properly care for, and all prospective settlers must pass an examination as to their qualifications. Veterans of the World War are allowed to acquire land on especially easy terms, and more than eight thousand former New Zealand soldiers took up farms within five years after the troops returned home.

The government still has about 4,500,000 acres of which about 400,000 acres are suitable for settlers. Most of the remainder is rough land, not available for farming. About 150,000 acres are disposed of each year, and the land department reports a profit of more than \$250,000 a year on its operations. It has loaned more than \$100,000,000 to 50,000 settlers, and about half of this sum has been paid back. In the meantime, the area under active cultivation has enormously increased. Out of a total of 48,000,000 acres in New Zealand suitable for farms and pasturage all but 5,000,000 acres are now occupied, and more than 17,000,000 acres have been seeded, either with crops or for pasture.

CHAPTER XXVII

THE WOMEN OF THE DOMINION

EW ZEALAND was the first country in the world to give women the vote. At first they were not eligible for election to Parliament, but later this bar was removed. New Zealand claims also that she had the first woman mayor. This was a Mrs. Yates, of Onehunga, a small town near Auckland. On the death of her husband, who had been the mayor, she was elected to fill his place, and I understand she handled her job very well.

The New Zealand women got the vote as far back as 1893, and that without any militant tactics. Few of them seemed interested in woman suffrage, yet since getting it they have gone to the polls in almost as great numbers as the men. One reason for this is a law making it compulsory for people to vote or lose their privilege. The names of the legal voters in each district are enrolled before every election. Any person who does not appear at the polls must give a good reason for his absence, or else when the next roll is prepared his name will be struck from the list.

There is no women's party in New Zealand, and it is often said that the women's vote has not had a distinct influence except in matters of infant welfare, maternity care, and the regulation of the liquor traffic. I put the question to a New Zealand woman, asking her:

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"What has woman suffrage done for New Zealand?"
"I will tell you one thing it has done," she quickly replied. "It has closed twenty-five per cent. of all the saloons for good and it has closed all of them after six o'clock in the evening. In some parts of New Zealand there is absolute prohibition by local option. One town I have especially in mind was noted for its drunkenness and disorder. It is now one of the quietest and most respectable of communities. It has cut down its police force, and for want of other use its jail has been made the headquarters of the Salvation Army."

Prohibition is a live issue in New Zealand, and some of the people believe the country will yet go bone dry. To get a license to sell liquor a man must show that he provides also food and lodging, so that all the saloon-keepers here really run hotels. Liquor may be sold only between the hours of seven in the morning and six in the evening, and one does not see drunken men staggering home at all times of night.

It used to be that in ninety-nine cases out of a hundred women served the liquor at the hotels. The prettier the barmaid the greater was her custom and the higher were her wages. But this has been changed by a law forbidding the renewal of barmaids' licenses. Nowadays, if one does come across a woman behind the bar in a public house, she is far from being the pretty, captivating barmaid of romance. More than likely she is the elderly widow of a hotel-keeper unable to support herself in any other line of business and so allowed to continue in this one during her lifetime.

So far not as many girls in New Zealand go out to work for their living as with us. Before the World War few

daughters of well-to-do homes thought of such a thing. But when the Dominion sent forty-one per cent. of her men to the front, their places had to some extent to be taken by girls and women. Even the banks, which are most conservative, opened their doors to girl clerks. Some of the women workers, having had a taste of independence, like to work, and there is growing up a class like our woman stenographers, bank clerks, and journalists. Many of the young women have taken up nursing, getting their training in the hospitals, which are all operated by the government or under government supervision. Those who were sent to Europe during the World War were nurses of at least ten years' hospital experience and they stood exceptionally high among the army nursing corps of the Allies.

The working women of New Zealand are, like the men. well protected by law as to their hours, wages, and conditions of employment. The government Department of Labour is watchful of their interests and welfare, and has woman inspectors who visit the factories and other places of business where women and girls are employed to see that the laws are obeyed. By defining a factory as "any building, office, or place in which two or more persons are employed directly or indirectly in any handicraft," the New Zealand government brings even the smallest establishments under the law, and thus protects women from sweatshop conditions. In offices and stores their hours of labour are fixed at forty-eight a week with an allowed overtime of not more than one hundred and twenty hours in a year, or three hours in any one day. In most of the manufacturing industries women work forty-four hours a week. The law requires that they shall be paid

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for overtime at the rate of time and a half. Minimum wages are fixed by law in practically all trades in which women are employed, including work in the stores. These minimum rates vary with the particular nature of the work and the worker's skill and experience.

The law also forbids the employment of any girls under fifteen years of age, and those under eighteen are not permitted to work for wages unless they have passed through the fourth standard, or grade, of the public schools. It is illegal to employ girls or "learners" in any trade without paying them wages while learning. In the past, some factories were found to be taking on inexperienced girls and paying them nothing, telling them that their services were not worth wages at the start, but that they would be paid as soon as they were "experienced." At the end of a few weeks or months these employers would often dismiss the girls, saying they had not made good, and then bring in a fresh lot on the same terms. Employers are required to provide sanitary, well lighted and ventilated workrooms equipped with fire escapes.

These labour laws are by no means dead letters. Employers are fined for every transgression of them. I have just been looking over a list of cases illustrating this fact. One man who cut short the dinner hour of his girls paid ten dollars and costs, and another, a restaurant owner, who kept his waitresses at work for eleven and a half hours in one day, had to pay a fine of thirty-six dollars, although one of the girls had had three afternoons off that week. Another restaurant man was fined seven and a half dollars and costs for employing his waitresses fifty-two hours a week, and a third was fined for not allowing one of his woman workers an hour for her meals. In the

town of Napier a storekeeper employing women for more than forty-eight hours in each of two succeeding weeks was fined forty dollars. The government inspectors learned of a baker who kept his two daughters working all night. They arrested him and fined him five dollars for each girl, warning him that on the next offence the fine would be fifty dollars. The saleswomen in stores must have seats and must be allowed to use them. I have before me reports of cases of merchants who were fined for not furnishing such seats.

The government also protects women from being worked at hours that will necessitate their going home late at night. One labour inspector reported that he found a factory in which a set of girls were put on from eight to ten in the morning and then taken off until one. They were worked from one until five, and again from seven to nine, making altogether eight hours. Another lot of girls worked from ten until twelve, from three until seven, and from nine until eleven. This arrangement did not require more than the legal time, but the officials thought it was bad for the girls to have to go home so late at night, and not have their regular time for rest.

The working day of hotel helpers, many of whom are women, is defined by law, and meals cannot be served outside the regular hours. If dinner is limited to the hours between six and eight, the traveller arriving at a hotel at eight-fifteen cannot get anything to eat until breakfast, no matter how hungry he may be. Even a world-famous prima donna found she could not get dinner at an unusual hour at her hotel in Wellington. She was accustomed to postponing her dinner until after her concerts, and asked to have it served at eleven o'clock. But the hotel manager



The Maoris do not make good servants but prefer to lead their own easy-going lives. This belle's robe is handwoven from New Zealand flax. She wears also the greenstone charm without which no native woman is fully dressed.



The town of Nelson has the reputation of having "the prettiest girls in the country," and "seven women to one man." Some of its surplus women find work in the hop fields.

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refused. It would have meant keeping several servants after hours and paying them overtime, and he was unwilling to do so.

The women working in factories are not so well organized as the men, and even where they do the same work they do not, as a rule, get as much pay. Most of the women in the manufacturing industries are in the clothing, hatmaking, tailoring, printing, and shoe-making trades.

In New Zealand there is no real servant class, such as our immigrant girls from Europe. The native Maoris do not make good house workers and most of the Chinese are in business for themselves, running laundries, fruit shops, and market gardens, though some of them are employed as cooks. The people who first came here from the British Isles were not of the lower classes. New Zealand was never a penal colony and men came voluntarily, seeking better opportunities than those they had found in the old country. Some came for their health, some followed the gold rush in the middle of the last century, and some were remittance men, members of the finest of the old British families. Moreover, many of the settlers acquired lands of their own, and the children of independent landholders do not care to go out as domestic servants. Therefore, domestic workers are scarce, and in the average New Zealand household the whole family shares in the work of the home. Every child has his duties, and, I may add, is generally paid for performing them. Nearly every tenyear-old has a savings account which grows with the money earned at home.

In the country it is almost impossible to get servants, and in the towns the young women prefer to work in the factories, notwithstanding the fact that when the matter

of board is taken into consideration, wages there are often less than those of house servants.

When a family does secure a servant girl she frequently rules the household, besides fixing her own wages and hours off. She usually demands one half holiday every week, every Sunday afternoon, and the whole day free every other Sunday.

The New Zealand government has not overlooked the servant girl. The working man's premier, Sir Richard Seddon, found that the employment agencies were cheating young women who came to them to get work, and that they often sent girls to improper places. So he started free public employment offices for domestic workers, which are still carried on.

In the report of a woman supervisor of these offices I find some interesting comments on how servants should be treated to make them efficient. She advises mothers to make domestic duties more attractive to their daughters, and to work with and teach them. To mistresses she says:

"A mistress who has but one servant should work with her during the morning hours. Under such circumstances a girl will become very proficient, and the domestic machinery will move along on oiled bearings. The mistress who does nothing to help her servant and is always hurrying her wears the girl out. It is she who brings domestic service into bad repute, and she who is driving the girls into the factories.

"Servants are becoming scarcer every year. Even the old women who used to be a trouble to the office have found employment, nearly all of them in the country. Some girls engage places and then do not go to them. Perhaps they

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find something better in the meantime and break their engagements. I would suggest that the government provide fines for such offences, as they cause great inconvenience. If an employer fails to take a girl after engaging her, the servant is entitled to a week's pay, so it seems only fair that a girl be penalized if she fails to report when she has accepted a place."

Just here I want to say a word about the pretty girls of New Zealand. These islands are full of them. The climate gives them the rosiest of cheeks, and they look much like the women of England, Scotland, and Ireland. In manners and dress they will compare favourably with those of the United States or Europe. They read the papers and are able to discuss the political issues of the hour with each other and with the men.

The women here do not go in for club life quite as much as do our women in the States. I think one reason for that is the fact that the population is more scattered through the country on farms than gathered together in towns. Another reason may be the fact that the New Zealanders take a great interest in games, and the girls and boys and men and women join in tennis, golf, swimming, and other outdoor sports.

CHAPTER XXVIII

A COUNTRY WITHOUT A POORHOUSE

OW would you like to be sure of a pension from Uncle Sam in your old age? How would you like to know that if your income after sixty-five years of age was less than three hundred and ninety dollars a year, you would get from the government at Washington at least enough money to keep you alive?

That is the situation here in New Zealand. Every citizen is assured that if old age finds him without sufficient money to live on, the government will provide up to a maximum sum of one hundred and ninety-five dollars a year. To widows with children larger pensions are paid.

New Zealand has had an old-age pension law for more than a quarter of a century, and everyone now seems to think it is a fine thing. Certainly there are no poorhouses here, as we know them, and the old-woman beggar is conspicuously absent.

According to New Zealanders, their country was the first in the world topass a non-contributory old-age pension law. In fact, I find New Zealand claims to hold twelve "Firsts" in social legislation. After listening to the enthusiastic talk of the people, I have been surprised at what their country, situated in what we think of as the most remote corner of the globe, has to show. According to my notes, New Zealand was the first country to:

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Provide non-contributory old-age pensions;

Introduce conciliation and arbitration of industrial disputes;

Establish universal penny postage;

Start government grading of butter, cheese, and hemp for export;

Go into the state insurance business;

Set up state maternity homes;

Open a government tourist department;

Give women parliamentary suffrage;

Operate state coal mines;

Organize a state department of public health;

Enact minimum wage laws for women and minors;

Build houses and sell them to workmen.

All these "firsts," and the fact that she has the lowest death rate in the world, back up New Zealand's claim of being the "Newest England" and a "Brighter Britain."

The old-age pension law was one of the many acts for the benefit of the common people put through by Seddon during his long term as premier. He introduced the bill and fought it through to passage in the face of considerable opposition. He took the position that pensions from the state were not a matter of kindness or charity to those past the ability to work, but only their rightful due.

The law is so worded that pensioners need feel no humiliation in accepting state funds. Its introduction states that:

"It is just and right that every person who has for a number of years assisted by his (or her) work in the development of the country, and has also by payment of taxes contributed to its good government, should be protected against want in his (or her) old age."

The law provides that the pensioner must have been a resident of New Zealand for twenty-five years prior to his application; that he must not during that time have been imprisoned for five years for any offence, and that he must not during the twelve years preceding his application have been in jail four months or on four occasions for an offence punishable by one year's imprisonment. The applicant must not during the past twelve years have deserted his wife and children and must have lived a sober and reputable life in the year preceding his application. All applications are made at the post offices, where such as pass the examinations are given certificates, each entitling its owner to a pension for one year. The certificates have to be renewed every year.

Since the first pension law was enacted, the amount of the annual allowance has been several times increased. Already the government has paid out more than forty-five million dollars in doles to the aged, and there are, I am told, about twenty thousand people now receiving these pensions. This is considerably more than one pensioner to every hundred persons in the country.

If the United States had a similar law, with the same proportion of pensioners, we should have 7000 of them in Washington, almost 90,000 in New York, 40,000 in Chicago, 28,000 in Philadelphia, and a thousand or more in each of a score of other cities. In the whole country we should have a million and a half pensioners, and if each received \$180 a year, the amount of the average pension in New Zealand, the total distribution of money among our old people would amount to more than \$288,000,000. As a matter of fact, this sum would be only about \$30,000,000 more than our government now pays out each year in

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pensions for old soldiers and their dependents, not including the payments to veterans of the World War.

One of Wellington's big buildings is the government life-insurance office. Here you may find out just how much the body politic is willing to bet on the chances of life and death of its people. The government has been in the life-insurance business for fifty years, but it has never forbidden the private companies to operate, and competes with them right along. Indeed, it is said that the latter are getting most of the new business because they put more life and energy into selling insurance than the state institution does. The government life insurance company uses the postmasters as its agents, and thus has offices at every crossroads. It requires as strict a physical examination as any private company, but its rates are low and the insured feel certain of their money. There are now some sixty thousand state policies in force representing an insurance of about eighty-five million dollars.

The state insurance business is managed like our private life-insurance companies and upon similar calculations of the chances of life and death. It sells some policies on the paid-up system and has also a savings-fund plan. Special rates are granted to those who abstain from intoxicating liquors, and another form of policy provides annuities for government clerks after they are sixty years of age. Fire and accident policies are also written in competition with the commercial companies.

One reason the government went into the business was the fact that the companies operating in New Zealand at that time were charging rates as high as those in the United States, England, and other countries, where the "expectancy of life" is not so great as it is here. The

New Zealanders are wonderfully healthy. They live, on the average, eight years longer than we do. It may be that their lives are lengthened by the amount of protection and security they have from their various government enterprises. Moreover, the country is not over-populated, there is no competition with coloured or cheap foreign labour, a living wage is guaranteed to all, farms may still be had on comparatively easy terms, there is little poverty throughout the Dominion, and the general level of comfort is high. The average wealth for all persons over twenty years of age has been estimated at four thousand dollars, and that notwithstanding the fact that there are few millionaires in New Zealand and not many persons who are rich according to our standards.

The per-capita deposits in New Zealand banks are steadily increasing, showing that the country is accumulating wealth. In 1890 the average was just under one hundred dollars for every one of the population; twenty years later it had risen to a little more than one hundred and twenty-five, and the latest figure is two hundred dollars. The present assets of the six principal banks total more than three hundred and forty millions of dollars, and their liabilities come to less than three hundred millions.

The postal savings banks are banks of deposit, paying interest of from $3\frac{1}{4}$ to 4 per cent. on all accounts. At present the deposits approximate a total of \$220,000,000 held by about 680,000 depositors. This equals one savings account to every 1.8 persons of the population. Deposits as low as one shilling, or twenty-five cents are taken, but no interest is paid on any sum below \$5 or above \$25,000. On sums up to \$2500 the rate is 4 per cent.; on larger amounts it is $3\frac{1}{4}$ per cent.



On the beautiful curved shore of Hawke Bay, protected from the ocean by a breakwater, is Napier, the chief shipping point of a large meat- and wool-producing district.



In the Mt. Cook Range of the Southern Alps are ten peaks more than ten thousand feet high. The great Tasman Glacier provides thrills for the most expert mountain climber.

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New Zealand has its building and loan associations, though not to the same extent as the United States. The farmers have also organized all sorts of coöperative associations. The stock of the New Zealand Loan and Mercantile Company, a big firm which buys up produce and ships it abroad, is owned chiefly by the New Zealand growers from whom it buys. I have visited a big store, the stock of which is held by its customers. It has a large capital, and its manager told me that it paid ten per cent. dividends. It is much like one of our department stores, with the prices marked on all articles offered for sale. Many of the meat-freezing establishments are managed by stock companies, in which the sheep and cattle owners are interested, and most of them pay good dividends.

There is a National Provident Fund, which any one between the ages of sixteen and fifty may join, provided that his income during the three years prior to joining has not been more than fifteen hundred dollars. No medical examination is required. A contributor to the Fund is protected in case of incapacity to work, his children and widow receive an allowance upon his death, and on reaching the age of sixty he receives for the rest of his life a pension of from two dollars and a half to ten dollars a week, according to the scale of his contributions. Married women contributing to the Fund get a bonus of thirty dollars on the birth of each child. The applicant joins by filling in a form at a postal money-order office or local office of the Fund and paying his first weekly contribution. Although the Fund is only about ten years old, it has nearly twentytwo thousand contributors.

Another institution in which New Zealand takes especial pride is the office of the Public Trust, the first institution

of its kind in the world. Through this the government acts after the fashion of our commercial trust companies. A public trustee is appointed for the whole country and he has under him a staff of lawyers of high reputation. Suppose a man dies intestate; the Public Trust administers his estate. If you want to make your will, the Public Trust will draw it for you and you may make the Trust your executor. Suppose you have been acting as trustee to an estate and wish to lay aside your responsibility; the Public Trust will take it over. If an insane person has no guardian, the Public Trust will look after his affairs. Unless expressly directed otherwise, all money coming into the office goes into a common fund. This is invested by the public trustee in first-class securities for the benefit of the estates in his charge.

The Public Trust now handles estates and funds to the value of more than one hundred and twenty-five million dollars, and the amount is growing every year. More than thirty thousand wills are on deposit in the office, an evidence of the increasing public confidence in the institution. Although it was established to give the people service at low rates and not to make money, and though its fees are never above three per cent. the office has been so well managed that it not only pays for itself, but yields a profit of more than fifty thousand dollars a year. While it is a government institution, the Public Trust provides its own buildings and pays taxes and postage just as if it were a commercial enterprise. Its employees are under the civil service and hold office during good behaviour.

Practically every New Zealand post office is a telegraph office, a telephone office, a savings bank, a government life-insurance and pension agency, and a money-order office,

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so you see postman and postmaster have plenty to do. There are now government telephones almost everywhere, although they are not so numerous in proportion to the population as they are in the United States. Telephones are still considered somewhat in the class of luxuries. In the hotels, for example, one rarely sees a telephone in every room, but there will be an instrument in the hall on each floor.

But there is another side to the picture of New Zealand's government activities. A man is worth not what he makes, but what he has left when his debts are paid. It is the same with a nation, and New Zealand has rapidly rolled up a huge public debt. At the end of the century it owed about two hundred and twenty million dollars, or more than three hundred dollars per head, or fifteen hundred dollars per family of five. This debt kept on growing, and then was more than doubled by expenditures in the World War, which were a tremendous burden to a small country like New Zealand.

Suppose the same conditions to prevail in the United States with its one hundred and five million inhabitants. Instead of the twenty-two billions we now owe, we should owe more than eighty-seven billion dollars, or almost exactly four times the sum that we and our children, and our children's children for generations to come, must be heavily taxed to pay.

On the other hand, it must be remembered that nearly half the total debt of New Zealand is invested in railroads, telephones, telegraphs, hydro-electric systems, farm land, and loans to settlers. These investments pay interest, and are represented by assets of much greater value than the amount of borrowed money spent upon them.

CHAPTER XXIX

WHERE THE WORKING MAN RULES

HAD lost myself in Auckland. I had been visiting our American consul in one of the suburbs under the shadow of Mount Eden and had started back on foot when I met a rosy-cheeked, bright-eyed, healthy-looking young man and asked him to direct me to my hotel.

"I am going that way," said he, "and if you will walk with me I will show you." So we went along together.

"How are times here?" said I.

"Very good," was the reply. "We all have plenty of work and we get enough to keep us from starving."

"What is your business?" I asked.

"I am a carpenter. I have a job building workmen's houses for the government, and I get sixteen shillings and tenpence (\$3.75) a day."

"What hours do you work?"

"Oh!" with a laugh, "my hours are not bad. I work only forty-four hours a week and have a half holiday Saturdays."

"But how about wages on Saturday?"

"The wages are just the same as for the other days. I suppose I should say I get one hundred and one shillings per week instead of fifteen shillings and tenpence a day."

This conversation gives you some idea of work and

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wages in New Zealand. Though there is some variation among the different industries, forty-four hours is the usual working week of the labouring man, and every one has his weekly half holiday. For any work beyond the standard number of hours in a day or week the men usually get paid time and a half or even double time.

My carpenter friend is typical of the New Zealand worker, who is a well-paid, well-housed, and well-fed individual. I noticed in Wellington, as here in Auckland, a general air of well-being and prosperity. The people are polite and friendly and do not seem inclined to take things in too much of a hurry. They are proud of their town, as I think they have a right to be.

Auckland is the largest city in the Dominion and is about the size of New Haven, Connecticut. Its spacious inner harbour, which has five and a half miles of smooth deep water, is thirty miles from the open sea. There are nine wharves, swarming with business, but they are not sufficient for the fast-growing port, one of the trade centres of the South Pacific. The annual imports and exports come to more than a hundred million dollars and the figure is growing rapidly.

The city is built up and down hill. Even Queen Street, the chief retail business thoroughfare, is not entirely level. All the tram cars start from the foot of this street, serving not only Auckland itself but suburban towns within a radius of eight miles. The lines are owned by the city, and every one is divided into fare zones of two cents each. Taxicabs are very expensive here, for New Zealand has to pay around a dollar a gallon for gasoline, which is imported from the United States.

Here, as elsewhere in the Dominion, the working men are

the lords and their unions have dictated many of the laws. The famous conciliation and arbitration acts not only recognize unions of workers and unions of employers, but encourage their organization. It is provided that a workmen's union may be composed of fifteen members and any such union may come under the law by registering itself with the Department of Labour. Three or more employers may form a union and register. The Conciliation and Arbitration Act was supposed to provide for the peaceful settlement of all disputes between employers and employed. From 1894, when the first act was passed, until 1905, New Zealand had no strikes. Although this legislation has not entirely prevented strikes in the last twenty years, it has undoubtedly reduced their frequency and severity.

New Zealand is divided into eight industrial districts, each of which has its Council of Conciliation. If there is a dispute, complaint may be made to a council by either party. The council sends for persons and papers, and after examination gives a judgment, which is filed as an industrial agreement.

If either party to the dispute is not satisfied, however, an appeal can be made from a council to the Court of Arbitration of the Dominion. This consists of three members, one of whom is a judge of the Supreme Court. One of the others is nominated by the national association of employers, and the third is named by the trades unions. This court gives the case a rehearing, and its judgment is final. It can fix wages and working hours, and it can impose fines. It may assess damages upon the parties to the suit, and all the property of the loser can be taken to satisfy such claims. If the judgment is against a trades

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union or an industrial association without property, the individual members of the organization are liable.

The unions do not have to register, and a registered union may, after due notice, withdraw its registration, but so long as it is registered it must abide by the decisions of the Court of Arbitration. Failing to do so, it may have its charter taken away from it. The advantage of registration to the unions is that only a registered union can have an employer brought before either a council or the Court.

Whether registered or not, the employer must appear. An employer or worker bound by an award or an industrial agreement who takes part in a strike or lockout in the industry affected is subject to heavy fine. Unless fourteen days' notice has been given, a strike or lockout in a public utility or an industry dealing in the necessities of life is considered a statutory offence, even when the party in fault is not bound by an award. A strike in the milk business or on a railroad or street-car line would fall under this provision.

I have before me the official reports of a number of industrial cases. Here is one that came before the Council of Conciliation in Dunedin at the instance of the Dunedin Painters' Union. The Council decided that the painters should work from eight o'clock until five on five days of the week, and from eight until twelve on Saturday, one hour being allowed each day, except Saturday, for dinner. The decision fixed the number of apprentices, and it provided that employers should hire members of the union in preference to non-union painters.

In the case of the Bakers' Union of Christchurch the Court of Arbitration decided that overtime must be paid at

the rate of time and a quarter for the first four hours and at the rate of time and a half for every hour thereafter. The decision limited each journeyman to but one apprentice, and fixed the term of apprenticeship to four years. It provided that no carter could be employed in a bakehouse, but that a baker might send out his employees to deliver bread, provided they were not required to work overtime.

Decisions of the councils and the Court may establish the rate of wages not only for the parties to the dispute, but for others in the same industry, although local and trade conditions are always taken into consideration. For instance, if the Court fixes the wages of the bookbinders in one district at so much a month the bookbinders in other districts will at once demand the same and most likely get it. Not all the cases are decided in favour of the unions, however. In determining fair rates, the Court of Arbitration has tried to find out the minimum on which a worker can live in decent comfort and also what wages each employer can give and still make a profit. Awards run for three years, when a revision may be asked. At the expiration of the first three-year period after the arbitration law went into effect the unions entered the Court with new demands for higher wages, but in many cases the increases were denied.

To an American, the Dominion laws fixing hours and wages and regulating relations between workmen and employers seem radical, but the New Zealanders do not think them so. They claim that as a people they are, like their British ancestors, naturally conservative. Their government, they say, has been compelled by force of circumstances to go into all sorts of things, and reforms



The Christmas holidays come in New Zealand's summer, and roses and sweet peas take the place of holly and mistletoe. Nevertheless, the people stick to home customs and eat the plum puddings of the British season.



Most of the land requires expensive fertilizers to produce grain. Therefore New Zealand raises wheat only for her own use and depends on sheep and dairy products as money makers.



Put a New Zealander near water and he will get into it. Many great swimmers have been developed, but accidents are so frequent that drowning is sometimes called "the New Zealand death."

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have come about in a natural and orderly way. For example, it was essential that farmers should get their produce to market. There were no big capitalists ready to finance railroad building, so means of transportation had to be provided by the government. The insurance companies did not adapt their rates to the conditions of the country; so the government went into competition. Twenty-odd years ago the New Zealand coal-mine operators took advantage of a diminished coal importation from Australia to put up prices for fuel. The government met this situation by working the coal beds of the public lands on the west coast. This it has continued to do, supplying its own railways and competing in the open markets with the private mine owners. The latter say they can stand the competition quite well, since the government mines are worked at a higher cost, not because of a difference in wages, for wages are regulated by law, but because the state miners take things easier and produce less. The "government stroke" is a common expression here for the way state employees do their work.

Again, take the story of how the Court of Arbitration came to be. It was told me by one of the officials of the Labour Department. Said he:

"The workingmen won their power in New Zealand through a strike that failed. At that time the unions controlled many branches of trade and they were fairly well united. The Maritime Union, whose members handled all the freight at the wharves, was an old organization, with plenty of money in its treasury from assessments throughout a long period of years. As the funds increased, it was decided that all new members should pay an initiation fee proportionate to the share each would

have in the assets of the treasury. There were but few labouring men who could do this, and the number of new members fell off. Although it could not handle all the freight, the union would not permit non-union men to work. The ship owners would not stand this. They took on extra men and defied the union. The union men struck, and through their relations with the other unions brought about a general strike all over New Zealand. Their demands were unreasonable, and the sympathy of the people was with the non-unionists and the ship owners. Men came in from Australia and elsewhere to help break the strike. The feeling was so great that even clerks in the stores asked for vacations, put on overalls, and worked for a time as stevedores. The result was that the strikers were badly beaten, and they knew it.

"Then they reconsidered the situation and decided that their only chance for a fair show in the future was in electing working men to Parliament. They began their campaign at once, adopting the rule that every candidate of their party must be a working man. They argued the question of their rights in the shops, on the streets, and on the stump. The people outside the labouring classes became interested in the struggle. Public sentiment changed. It was seen that there were two sides to the question, and enough working men were elected to Parliament to give the unions the balance of power. Organized labour in New Zealand has never had a majority in Parliament but it sent up enough of its own men to be a powerful factor in shaping the laws of the Dominion."

After the end of that great strike one of the first questions Parliament considered was how to avoid such con-

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flicts in the future. How could it best look after the interests of the three parties to labour disputes—the employers, the employees, and the public? The conciliation councils and the Court of Arbitration for industrial disputes were the answer the legislators found to their problem.

The workman's grievance against the "company store" and the "company house" does not exist in New Zealand. where payment for labour in goods is illegal. In any action for wages, any goods or articles furnished by the emplever or supplied on his premises cannot be brought forward as an offset, nor can the employer sue his clerks for things so bought. Workmen must be paid in money, and at least once a month, if they so desire. In absence of written agreements those engaged in manual labour must be paid weekly, and if not so paid they can attach all money due or thereafter to become due to the employer on the work. The wages of those who receive less than ten dollars per week cannot be touched for debt and where a man goes bankrupt the unpaid wages of his clerks and workmen for four months preceding are preferential claims on the estate.

For many years the government built workmen's houses, which might be leased or purchased on the instalment plan by wage-earners. In the serious shortage of houses after the World War these operations were extended. Parliament appropriated about five millions of dollars to be lent to employers and corporations for building workmen's houses and apartments. The law allows borrowers from the government's fund to erect workers' houses costing up to thirty-four hundred dollars, and the money is advanced on five-per-cent. interest. The workmen get

title to the houses by paying each week a little more than the ordinary rental charge for such homes.

As in Australia, the weekly half holiday is compulsory and the factory owner or merchant who keeps his place open after the hour for closing is fined for doing so, whether he requires his employees to work or not. I find a record of a man in Foxton who kept two boys under eighteen years of age at work on Saturday afternoon. He was called up by the Court and heavily fined. Another man employed a carter to work on a half holiday. He paid five dollars and costs for so doing. It is the same with all classes of clerks and it is the same in the factories.

The day for the weekly afternoon off is not specified by law, but is usually fixed every January by the authorities. In some towns it comes on Tuesday, in some Wednesday, in some Thursday, and in many Saturday. Saturday is the day usually chosen by the factories, even though the stores in the same town may close on another day. If Saturday is the day fixed there are certain classes of store-keepers such as grocers, butchers, and market men, who may choose another day for their weekly half holiday.

On half holidays the streets of Auckland and the other towns in the Dominion are as deserted as on Sunday. The hotels are usually open, but as far as I can see, there is much less drinking at such times than one would expect, and nothing like that on Saturday afternoons in the cities of Scotland, or even in our own towns before prohibition. Most of the people here go to the parks or out into the country. There are cricket matches, golf tournaments, and outdoor games of all kinds.

As a people, the New Zealanders are devoted to sports. In football, the national winter sport, New Zealand has

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held the world championship. Everyone, men and women, boys and girls, seems to play games of one sort or another. They go in for tennis, golf, hockey, polo, and all kinds of water sports. Owing to the great numbers who swim in the lakes, the rivers, and the surf, there are many fatalities every year, and drowning is sometimes called the "New Zealand death."

Like the Australians, the New Zealanders love nothing so well as gambling on horse races. But here the betting is regulated by the government and one seldom hears talk of crooked methods. Betting is done through a machine, the invention of a New Zealander, called a totalisator. Only those actually present at the track are allowed to bet, so there are no poolrooms such as have caused so much scandal in the United States, and there is no gambling by telegraph or telephone. All but ten per cent. of the money placed on each race is divided among the winners. The tenth held out goes to the government and the club that stages the event, the club taking three fourths of the amount, and the government the rest.

At the meets the horses are all on view for at least half an hour before each race. After a spectator has satisfied himself as to how he wants to place his bets, he goes to the betting machine, gives the number of the horse on which he wishes to invest, and purchases tickets stamped with that number. The lowest price for a betting slip is two dollars and a half, but tickets at ten times that amount may be had.

The totalisator, or the "tote," as it is always called, is a score board with slots in its face. Under each slot is the number of a horse, and above each number is the amount bet on him. Another window gives the total

amount put up on the race, and at the left is a board showing the dividends that the winner will pay. The "tote" pays only on the horses that win first and second places. Two thirds of the money on each race, minus the ten per cent. for the club and the government, is paid those betting on the winner, and the other third is divided among the backers of the second horse.

Seeing the throngs at the races, at football matches, and on the beaches, one feels sure that in New Zealand Jack will never be a dull boy on account of all work and no play.

CHAPTER XXX

ON THE GOVERNMENT RAILWAYS

AKE a seat beside me on the train from Auckland to Rotorua, and see how one part of New Zealand looks out-of-doors. We shoot from the city out into a rich farming district. The fields are green with luxuriant grass, or black where the soil is being turned up for planting. Near Auckland the farms and farmhouses are small. The pioneer cabins are not so big as those in the newly cleared regions of the United States. In many places there is a scarcity of lumber. The average farmhouse is a wooden cottage of four, five, or six rooms roofed with galvanized iron and there are no barns, no stables, no outbuildings. The stock feed in the fields all the year round, for the grass is always green, and the winters are not severe.

We ride over plains covered with bush, a sort of thick scrub growth not unlike dwarf cedars, and then follow for miles the banks of the Waikato River, the largest in New Zealand. Now we are in another farming section. Here the holdings are larger. We cross a big farm where there are droves of cattle and sheep. The sheep are feeding on turnips, biting them out of the ground in which they are growing. We pass through some rolling fields that look like the blue-grass country of Kentucky and others that remind one of the meadows of old England. Here and

there are groves of cabbage trees, each with its tall trunk ending in a feather duster of green leaves.

As we proceed we come into a region of ferns. They cover the hills, and in the valleys rise into trees shaped like umbrellas. The whole earth is matted with them. The tree ferns have stems as thick as a telegraph pole and some rise fifteen feet without a branch.

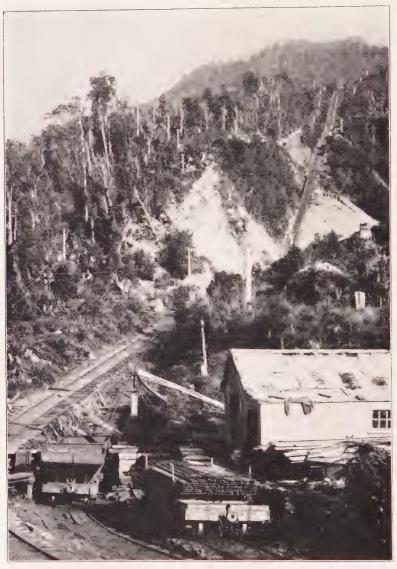
Farther south we enter the highlands. We pass through forests of tall trees wrapped around with vines, their wide-spreading branches thick with leaves. Many of them are loaded with flowering vines, which ornament the living as well as the dead boughs, hanging down amid the green leaves or wrapping themselves around the dead limbs to make them green again.

As we go I examine the railroad. Like all in the Dominion, it belongs to the government, and its officials are civil-service employees. The conductor, who is called the guard, comes through from time to time and punches the tickets. This is a regular feature of New Zealand travel. I hardly settle down after one punch before the guard or an inspector comes and asks for my ticket once more, and at the end of a long journey it is as full of holes as a sieve.

The smaller stations serve also as post-offices. They have signs showing that they are government savings banks and government life-insurance offices as well. At every stop a bell is rung half a minute before the train starts, and every now and then there is a five-minute halt that the passengers may get out and buy a cup of tea or a glass of whisky or beer at the hotels, which are always found close by the larger stations. The whisky is Scotch, and has a smoky, peaty taste. Tea is fourpence



The railroad from Auckland to Rotorua passes through field after field of turnips, where sheep bite the vegetables from the ground. New Zealanders say that a good turnip country is a good sheep country.



About the only privately owned railroad tracks in the Dominion are light lines built to get out lumber and coal. They act as feeders to the government system with which they are connected.

ON THE GOVERNMENT RAILWAYS

a cup and everyone takes it with sugar and milk; it is strong, but not bad. Coffee is not sold, for no one wants it. The New Zealanders are great eaters of meat and drinkers of tea. Nevertheless, they are generally of the lean, athletic build. I suppose this is partly on account of the exercise everyone gets in the out-of-door sports.

My chief complaint against these government railroads is their poor heating arrangements. To-day the weather is chilly and every passenger has a travelling blanket wrapped around his feet. I have one of fox skin, and to this I have added my rubber hot water bottle. I take it from my bag and have it filled from time to time by the girls at the station tea shops. One young woman is amazed at my request. She wonders why I want the hot water. At last a smile creeps from her lips to her eyes. She says, "Oh, I understand. You want it for the bai-by (baby)." "Yes, my dear," I say, as I hand her a shilling, "but I am the bai-by."

One hears a good deal of the English cockney accent in New Zealand. "A" is frequently like "i" or "y." I find that I have to translate what is said on the streets or in other public places before I understand what it means. This is the case in the stores. In buying the fox skin I spoke of, I asked the department store clerk at Auckland where the rugs were kept. He said:

"Go through that aisle and down by the lices."

I could not think what he meant by "the lices," and a brief vision of crawling insects and frowzy hair came before my eyes until on the other side of the store I saw some white lace with carpets and rugs beyond and then I knew the young man meant laces. As for the letter "h," it is

worse mistreated in New Zealand than in London itself, on when it should be off, and off when it should be on.

Still, these faults in pronunciation are not heard among the better class New Zealanders. They pride themselves on speaking pure English, and claim that they are far superior to the Australians in their use of the mother tongue. Of late, a decided movement has been started in the schools and throughout the country for pure English.

The gauge of the railway from Auckland to Rotorua is only three feet six inches, which is the width of all the three thousand miles of track in the two islands. In 1870, when the government took over the few short lines then operated and began its railroad-construction programme, it was faced with the problem of building through a rough and mountainous country with as little expense as possible. So the narrow gauge was adopted. Nevertheless, the cost has been enormous. The total capital invested in railways is now almost a quarter of a billion dollars, or an average, including all equipment and buildings, of upward of sixty thousand dollars per mile. Exceptionally steep grades have had to be overcome. There is a three-mile stretch on the line between Auckland and Wellington where the trains climb up one foot in every fifteen. This is said to be the steepest railroad grade in the world. It is where the line passes over Rimutaka Mountain. Two engines are used to make the ascent, and the locomotives going down are equipped with steel shoes which grip a centre rail and act as brakes. In places there are windbreaks built to protect the trains from the terrific blasts that sweep over the mountains. On two occasions the cars have been blown from the tracks.

ON THE GOVERNMENT RAILWAYS

Other items in construction costs are the numerous bridges and tunnels. There are many rivers fed by heavy rainfalls, and at frequent intervals long spans of steel and concrete are found. On the west coast of the South Island is the Otira Tunnel, which runs for five miles under mountains. The power used in the tunnel is electricity. This road was built to bring coal from the western fields to the eastern railroad connections.

The longest run in the Dominion is that from Wellington to Auckland, a distance of but four hundred and twenty-six miles. This is the only road in the country on which sleeping cars are used. The New Zealand sleeper, which is only fifty feet long, is by no means the roomy affair to which we are accustomed in the States. The car is divided into two- or four-berth compartments reached by a narrow corridor extending along its whole length. While my berth was being made up I had to stand in the hallway with the other three occupants of my compartment.

Though our cars were small, and much of the journey was over steep grades, the going was not nearly as bumpy as one would suppose, for the engineers take pains to run their trains smoothly and do not jerk and jostle the passengers at every start and stop as is often the case in the States. Practically all the engines and coaches used on the Dominion railroads are now built in New Zealand, either in the government railway shops or by a private firm.

The New Zealand government believes that the railroads exist for the people, and is managing them in their interests and for the development of the country. It does not try to make a large profit, being entirely satis-

fied with a return of from three to four per cent. per annum. In the past, surplus revenues have been returned to the taxpayers in the shape of reduced freight rates and passenger fares, but in the years of depression after the World War the lines earned less than three per cent.

The regular passenger rate is two cents a mile. Young people under twenty-one who are learning a trade or business and must go to work by rail are allowed reduced fares. All students may travel on cut rates, and in districts where there are no schools the railroads take children to and from those that are nearest free of charge. This is true whether they are going to private or to public schools. The government considers this service worth what it costs because it promotes popular education. Now and then special trains are run to take the school children out over the country for practical lessons in geography. The charge for such excursions just about covers the cost of running the extra trains, and any school can have an instructive trip of this kind upon the request of the teacher in charge.

One New Zealander with whom I talked said:

"It is our idea that the railroads are the servants of the people. We want to bring every farmer's produce to the markets at the lowest cost, and to make it possible for our people to compete with those of other lands in the markets of the world. If we can build railroads so that the man one hundred miles from the seaboard can get his produce aboard ship at the same cost as the man who lives only ten miles away, the first man's land becomes as valuable as that of the land-holder near the coast. Then we get more taxes out of him and he becomes a more prosperous member of the community. We are now devoting the

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roads largely to opening up new country, and are pushing them out into the public lands."

"I notice that you have more than fifteen thousand government railway employees," said I. "Is not the service on the railroads seriously affected by the fact that the government runs them? Do not the clerks and the trainmen vote to keep in power the politicians who promise them the most in the way of raising their wages or enabling them to hold their jobs?"

"I don't think there has been any attempt to do anything of that kind, and I doubt if it could succeed," was the reply. "Our civil-service rules are rigid and we maintain them. There are special boards to which railroad employees may bring their grievances. Furthermore, when a new party comes in, there is no wholesale overturning of the government service such as, I understand, used to prevail in your country. Only the elected officials are changed. Promotion in government service is by seniority, and few men, if any, get their jobs through political pull."

CHAPTER XXXI

THE YELLOWSTONE OF NEW ZEALAND

ARK TWAIN said Pittsburgh looked like "Hell with the lid off." I have come to a part of New Zealand that looks like "Hell with the lid on," save that there are a thousand and one holes in the cover, from which all sorts of poisonous gases, malodorous smells, boiling springs, and other infernal manifestations are pouring forth. I am in the Yellowstone Park of New Zealand, a land of volcanoes, geysers, earthquakes, and lakes of boiling mud, a land in which old Mother Earth seems afflicted with perpetual colic and is ever vomiting forth hot paint, or belching out steam full of alum.

This region is situated near the centre of the North Island, one hundred and seventy-one miles southeast of Auckland. It is about thirty miles wide and one hundred miles long, covering almost two million acres. The crust upon it is so thin that in walking or riding over it one seems to hear a thousand devils grumbling and raging below, and almost expects to crash through into Hades at any moment.

Here the face of the earth changes from week to week. Great cracks open, new boiling pools burst forth, and there are frequent earthquakes. One spot is known as Earthquake Flat, because it shivers and shakes regularly every ten minutes. On top of a mountain in the geyser field

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there is a great hole called the "Safety Valve of New Zealand," out of which constantly roars a column of steam. Now and then a mountain breaks into eruption. Some of the volcanoes are active, and no one knows when one of those now dormant may spring into life, as Mount Tarawera did in 1886. In that year, on the 10th of June. several native villages were covered to a depth of sixty feet by a deluge of mud. Both houses and inhabitants were destroyed as were those of Pompeii and Herculaneum by the eruption of Vesuvius centuries ago. The bottom of a big lake was blown out and in its place came a roaring crater, which sent up a column of steam to a height of almost three miles. The earth broke open. There was one crack nine miles long. New lakes were formed, clouds of ashes and dust turned noon to night, and throughout the region there was a downpour of water, mud, and stones. The noise of the explosion was heard five hundred miles away.

The eruption destroyed the famous pink terraces of the New Zealand Yellowstone. The terraces were in the form of basins made by the sediment from the mineral waters of a geyser one hundred feet above the lake. They were filled with the clearest of boiling water, blue at the topmost terrace, and changing in colour to a lighter hue as it fell from basin to basin. The walls of the terraces seemed to be made of jewels, some pink, others white. The water played over them in tiny cascades, and when the sun shone the hillsides were alive with showers of diamonds, pearls, emeralds, and rubies. Since the great eruption, terraces have not formed again, as it was hoped they would, though small and imperfect basins of similar structure are occasionally seen to-day.

In my journey here from Auckland, the train climbed to an elevation of about one thousand feet above the sea. As we entered the volcanic region the earth seemed hollow, and it rumbled and grumbled as the cars went over it. I saw steam coming forth from the cracks here and there and wondered if the crust might not break and drop us into the bubbling, boiling, steaming mass that evidently lay below.

We passed the village of Koutu, which is almost hidden in columns of steam pouring forth from the ground, and skirted the shores of Lake Rotorua to the town of Rotorua itself. Rotorua is the most famous health resort of the South Seas. The country about it is clouded with vapour from pools of boiling water, each of which has medicinal properties. There are hotels and cottages and all the surroundings of similar resorts in the United States or Europe. The government has charge of the springs and fixes the rates for baths and accommodations, thus preserving the use of the place for the people at reasonable cost.

There are public gardens in which are the great bath houses and other buildings. On the grassy lawns tourists and health seekers may bowl and play tennis and croquet. There are long borders of beautiful flowers. The town is laid out in broad streets shaded by oaks, pines, and gums, through which the blue waters of Lake Rotorua may be seen sparkling in the sunlight. It is no wonder that tens of thousands of visitors come every year to this spot.

Many of the baths have curious names. One, owing to the beauty it gives the complexion, was years ago named after the famous French actress, Madame Rachel. Another is called the Priest Bath, another the Painkiller, a third the Coffee Pot, and a fourth the Blue Bath. The



Rotorua, the Yellowstone of New Zealand, with its hot springs baths and geysers, is the chief health resort of the Dominion. The hotels and even the sanatoriums are controlled by the government.



Wairoa never plays unless it is given a barrel of soap—then it usually goes up in great style. But except on special occasions the government does not permit it to be dosed, as this weakens a geyser.

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Lobster Bath is so hot that it turns one the colour of a boiled lobster. The names sound queer at first, and when I was told I could have a half hour at The Priest, I felt like protesting I was not a Catholic, but a cast-iron Presbyterian.

Joking aside, the baths are wonderful. The Rachel is a boiling cauldron of enormous depth with a flow of fifty thousand gallons daily. The water evidently contains much sulphuretted hydrogen, for a smell of bad eggs fills the air all around it. The visitor is usually disgusted until he steps into the pool. Then his skin seems to have turned to satin, and he is as comfortable as though on beds of rose leaves. The Coffee Pot pool is covered with an oily slime and the water is thick, brown, and muddy, but it gives great relief to any one suffering from rheumatism. In the Spout Bath, the patient goes down into a sort of cave, where the warm water pours on him from a spout above. The boiling water from one of the springs is mixed with waters of a cold lake to make the temperature endurable. Others of the baths have such strong mineral properties that one must be examined by a doctor before he can enter them.

For my guide in visiting the geysers, I have one of the Maoris, many of whom live in this region. I chose a woman who spoke fair English to take me through the crackling, steaming, rumbling, spurting region about me. She leads me from one wonder to another. Here is a pool of boiling, bubbling mud which now and then shoots a column high into the air. That great round vat with the white walls is made of the silica and other minerals thrown up by a geyser called the Brain Pot. That vast pool in which the yellow fluid seethes and boils is known as the Cham-

pagne Pool; its contents fizz like so much champagne, and the gases now and then throw the water up to a height of six or eight feet. The walls are of different colours, here white, there dark red, and there yellow with sulphur. We go to see the Pohutu Geyser, which formerly twice a day sent a majestic column of water high into the air for from twenty minutes to three hours at a time. But to-day Pohutu sulks and is entirely unreliable, though a way has been found to make it perform on demand. When some distinguished visitor comes along, the officials give the geyser an emetic of several barrels of soap, and then it plays up in great style. And that reminds me of the Pack-horse Mud Geyser, so named because it was not active until one day a pack horse fell into it. Before that it was simply a quiet pool of mud containing sulphuric acid.

One of the most remarkable of all the geysers of this whole region was the Waimangu, which during the years of its activity was undoubtedly the greatest wonder of the kind in the world. It was not discovered until 1901 and for five years after that it played almost every day. It was fierce "play," though, for, unlike the ordinary geyser, the Waimangu flung up black mud and stones, as well as scalding water, sometimes to the height of fifteen hundred feet. Then suddenly, for no apparent reason, it stopped, though it is believed that it may at any time break forth again. Once two girls and a guide were caught in the flood of scalding mud and were killed. Now one sees there only a hollow of some two acres covered with black, steaming water.

But come and take a trip with me into the mouth of Hell itself. This is a region about twelve miles from

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Rotorua. We sail across the lake, passing over what was evidently once a volcanic crater, then take horses across country to Tikitere. As we near it we see great columns of steam rising into the air. We tie our horses and, staff in hand, plunge into the vapour. We are in the midst of acres of boiling springs separated by thin walls upon which we walk, looking down into the terrible commotion below.

Here is a whirlpool. The water is as black as ink. It boils and steams and bubbles and spits. It is hotter than the "burning fiery furnace" into which King Nebuchadnezzar cast Shadrach, Meshach, and Abednego. Watch out, for if your foot slips you will be scalded to death.

Now we are on a great yellow mound looking into a sulphur pool, the gases of which almost sicken us as we stoop over. The pool is filled with boiling mud. The steam is so thick we can hardly see through it. Be careful where you step. A girl slipped into that vat the other day and came out cooked.

Look at this hole! See how it churns up mud and oil. It makes a noise like running machinery and the Maoris have named it the Donkey Engine.

See the white stuff on which you are standing. It looks like salt. You have passed out of the sulphur fields and are now on hills of snow, which glisten in contrast with the boiling mud about you. Pick up some of the snow or salt and taste it. How it puckers your mouth! Your lips and tongue wither as though you had bitten into a green persimmon. The stuff is neither salt nor snow. It is alum. There are bushels of it here, mixed with other minerals, and in some parts of New Zealand there are cliffs of alum and springs that flow alum water.

But let us take a look at the Inferno. We walk through

a stream over a thin crust of sulphur and gaze down into a great vat twenty feet deep and so large that you could drop a native house into it. It seems to be filled with boiling paint, and as it seethes it now and then throws up a column of mud. The odour is nauseating and we give our hands to the guides and beg them to lead us away. We go out through clouds of camphor steam from the Devil's Punch Bowl, and on into the open, where there are green hills, blue sky, and the good earth of every day.



White Island is a roaring, steaming sulphur pit, and has a lake of hot, acid water. The earth is treacherous and corrosive, and there is no sign of life except the birds of the air.



The government restaurant at Lake Taupo is designed after the typical Maori house, with its wonderfully carved columns, walls, and rafters. Such houses took years to build and were often fifty feet long.



Much of the charm of the *poi* dance comes from the flash and play of light fibre balls on short flax strings. The balls are swung in time to the soft crooning of the Maori women as they dance.



In the hot springs district Mother Nature helps the Maori housewife by providing outdoor fireless cookers. Vessels of food are placed over holes or in the hot pools—and that is all there is to it.

CHAPTER XXXII

THE MAORIS

HIS morning I stood and watched a crowd of Maori girls and boys swimming together in one of the steaming pools near my hotel at Rotorua. The pool was about twenty feet square, and in it were a dozen children as naked as the day they were born. Steam rose from the water, and in the rays of the morning sun the brown bodies shone through the mist. One of the bathers was a girl of fourteen. She was pouring water over herself with a bucket, when I threw a silver sixpence into the pool. With all the rest she dived for it, finally emerging with the coin in her mouth. As I walked on to other pools I saw here and there the heads of men and women floating, as it were, upon the water. They were Maoris, but whether they were taking this method of getting warm or merely having their morning baths I do not know.

I have been into many of the Maori houses. They are a sort of cross between an Indian hut and an English tenant cottage. About Rotorua many of them are built directly over the steaming earth, and have warm bathing pools behind them. In this part of New Zealand old Mother Earth is kind to her Maori daughters; she does their cooking for them. They never have to make a fire or put the kettle on. Each woman has a steam cooker of her own, always at the right temperature. This cooker is usually

an old wooden box with the lid knocked out and slats nailed on the bottom, sunk into the earth over a steam hole. The food is dropped in, an old piece of carpet or cloth is thrown over the top of the box, and in due time the meal is cooked.

Cooking is done also in the boiling pools. Potatoes are pared and put into bags made of a network of flax, each holding a quarter or half peck. The bag is dropped into the pool and tied with a string to a stake outside. In a little while the potatoes are ready for eating. Meat may be prepared the same way or it may be put into a bucket and steamed. In fact, the Rotorua Maoris, who now celebrate Christmas in British fashion, cook their plum puddings in these petty volcanoes.

In some places all the villagers cook at one great vat, and in others, such as Whakarewarewa, all do their washing in the same hot pool, the water of which is soft and cleansing.

It is surprising how few Maoris one sees in travelling through New Zealand. According to the last census there are about fifty-two thousand of the aborigines living in the Dominion, most of them on the North Island. The race is more than holding its own, and has increased by about ten thousand persons in the last thirty years. Most of the Maoris are scattered over the country in villages situated on lands reserved for them. They are represented in Parliament by four members, and although subject to the laws of New Zealand, they are governed largely through their own chiefs. The better class dress in European clothes, both men and women affecting bright colours.

No one knows where the Maoris came from, although a number of scientists are convinced that they navigated to the New Zealand islands from Hawaii. Others believe

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that they originated in Tahiti or Tonga. They have light brown complexions and high cheek bones and their noses are more like those of the Anglo-Saxon than of the North American Indian. The men are of magnificent physique, being tall, broad-shouldered heavyweights, with strong necks, big hands, and big feet. They excel in games, especially in football and other contests where quickness of eye and hand is essential. Nearly all of the men speak English. They are orderly and well-behaved, and even when drunk do not cause as much trouble as do our Indians.

I rather like the Maori women. The older ones are not especially good looking, but they seem well disposed and pleasant. Some of the younger ones are beautiful and many have rosy complexions. They have luxuriant dark hair, heavy eyebrows, and liquid black eyes full of soul. Some of them are clean and nearly all are intelligent. Their beauty vanishes with years. Now and then one sees an old native woman with her chin and lips tattooed. after the ancient fashion. This was a sign of a wife's submission to her husband. The young women of to-day do not thus mar their good looks.

The Maoris used to be experts in tattooing. In the past both men and women decorated not only their faces but most of their bodies in that way. Every great chief had his face covered with ornamental spirals and designs picturing his exploits in battle and was tattooed on the thighs and hips in patterns that often extended from his knees to his waist, giving him the appearance of having on a pair of neat-fitting trunks.

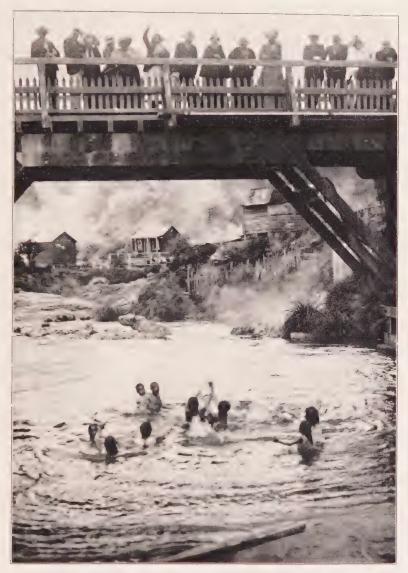
The women were tattooed chiefly on the lips and chin, with a sort of fish-hook curl at the corner of each eye.

Some of them had their thighs and breasts decorated. The tattooing instrument was a small bone chisel, which was driven in with a mallet. The pain was so great that the work could be done only a little at a time, and a complete job often took years.

When the British first came to New Zealand cannibalism was quite general among the Maoris. The tribes warred with one another, and after a battle there was always a feast of human flesh, in which the women were not allowed to join. The greatest insult one Maori could offer another was to hint that the man's father had been eaten; for this was considered a family disgrace.

I have before me a paper that tells just how one of these cannibal feasts was conducted. The corpse of one of those killed in the fight was sacrificed to the god of war and the rest of the dead were given over to the braves who had taken part in the battle. The cooking ovens were dug out of the earth and the human flesh was thrown in and kept there for about twenty-four hours. When it was roasted the chief had the first bite, then his sons, and then the whole army. The eating was accompanied with singing and dancing, and all gorged themselves to such an extent that many died after the banquet. When the feast was over the remains were packed up in baskets and sent around to the neighbouring tribes. Any tribe that accepted the offering was supposed to have made a treaty of friendship with the senders and to be ready to fight with them thereafter.

In spite of their cannibalism, the Maoris were more advanced in civilization than our American Indians. They had a social organization of their own, the people of each tribe being divided into classes consisting of priests, chiefs,



"This morning I stood and watched a crowd of Maori girls and boys swimming together and diving for pennies in one of the steaming pools near my hotel at Rotorua."



The Maori *haka* used to precede battles and was intended to work the braves into a fury, for the fight. Nowadays the *hakas* are frequently staged for the benefit of tourists.

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a middle class, and slaves. They were warlike and it is doubtful whether the British could have gained a foothold on the islands without great loss of life had it not been for the dissensions among the various tribes.

Maori marriage customs were much like those of savages in other parts of the world. Sometimes girls were carried off by force, and then the friends of the groom and the friends of the bride would fight each other. Both polygamy and divorce were allowed and the chiefs usually had several wives. The Maori gods were demons who were feared rather than reverenced or worshipped.

The men were fishers and fighters, and the women cooked the food, wove baskets, brought the firewood, and made the clothing. The men were not hunters, for there was no big game in the islands. They snared the wild pigeons and other birds. When Captain Cook came along in 1769 he left the natives the first pigs they had ever seen.

In the days of tribal warfare the natives often barricaded themselves within an enclosure called a pa, the term now used for their settlements. As day after day they pursued their policy of "watchful waiting" for their enemies, the men occupied themselves with wood carving, in which they became most expert. To-day one sometimes sees the doorways of their houses beautifully and accurately carved as in the olden times. They had no patterns but made up their designs as they went along.

The women used to make most elaborate and beautiful feather cloaks, plaiting the soft, downy plumage of the kiwi into woven flax. These cloaks were handed down from mother to daughter. Few are made nowadays, but they are sometimes worn on special occasions and in the poi dances.

For the poi dance the girls are dressed in kiwi-feather cloaks or in loose embroidered draperies of gay colours. Their long, wavy dark hair is confined only by ribbons about their foreheads. Usually their feet are bare. The dance gets its name from the two small balls of flax fibre with which each girl is provided. These are attached to strings and, as the girls go through various movements, representing such things as swimming, the flight of butterflies, the soaring of birds, or the rowing of a canoe, the poi balls are swung in perfect time. The music is a soft crooning, which is delightful, as the Maoris all have beautiful speaking and singing voices.

The men's dance, the haka, is quite different. In olden times this usually preceded a battle and was intended not only to work the braves into a state of fury but also to put them in good condition for the fight. It calls into play practically every muscle of the body. It is always possible for tourists to see some kind of a haka, but only on great occasions, and for distinguished visitors, like the Prince of Wales, for example, is it witnessed in its true glory. Then Maoris, who in ordinary life may be doctors, lawyers, grocers, and landlords, put patches of black paint on their faces, array themselves in knee skirts of flax fibre, and arm themselves with feather-tufted spears. With their bodies bare to the waist and with bare feet and legs, they leap and stamp, stick out their tongues, and make faces such as the old natives believed would frighten their enemies, give sharp barking shouts, slap their knees, and swing their spears in perfect time to the music of a band.

In their primitive state the Maoris were, of course, superstitious and traces of their ancient beliefs are still to be found. For instance, near the native fort at Rotorua

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is a kind of bird box set on top of a pole. This was a spirit house, and when danger was near, the spirit who lived in it was supposed to shout out a warning to the people. Within the memory of old native women the Maoris used to put food in the box for the spirit.

Like other South Sea Islanders the Maoris believed in the tapu, by which certain things were forbidden. For example, a chief, his family, and his belongings were tapu. A chief who touched his own head must put his fingers to his nose and snuff up the sacred contagion from his head or else he would suffer the consequences of tapu. One might make a tree tapu by giving it a chop with an axe. Certain animals, places, and foods were forbidden. There are cases on record where natives in perfect health died in great agony after finding they had made a mistake and eaten some food that was tapu. Charms were worn to ward off evil. The most common was a piece of green stone carved into a grotesque figure with rolling eyes and tongue lolling out. This is the tiki, or green charm, which is still often worn by the native women on chains about their necks.

It gives one an idea of how recently the Maoris were savages, feared by the pioneers, to hear the story of the first white man born in the Wellington District, who is still alive. He remembers how one night when he was three or four years of age the Maoris came upon the hut that his parents had set up in the bush. The older people were obliged to run for their lives, but the child was too heavy to carry and could not walk well. If they tried to take him, all might be captured and killed. So he was thrust far up the chimney and told that whatever happened he must make no sound. There

he spent the rest of the night, without a cry, while the Maoris searched the house and took away whatever struck their fancies. In the morning, after the natives had left, his parents returned and took him down from his perch, half dead with fright and exhaustion.

Yet the grandchildren of those uncivilized Maoris are to-day occupying important positions in the Dominion, acting as members of Parliament and making good in various professions. They had their own battalion in the Anzac forces in the World War and were conspicuous for bravery. Many of them married French girls. The cultured Maori is received in any society. The outstanding orator of New Zealand is Sir James Carroll, the son of an Irishman and a full-blooded Maori woman. He has served in the highest position his country can bestow, for he has been acting Prime Minister of the Dominion.

In New Zealand, while intermarriage with the Maoris is not exactly favoured, neither is it actually frowned upon, and the number of half castes is increasing. Still, one hears gossip about mixed marriages. There is the case of a wealthy New Zealand girl who announced her intention of marrying a native. Her mother was opposed and took her daughter on a trip around the world. But the girl returned and married her Maori. Her children are rather dark, yet they go everywhere. Another case I have heard of is that of an Englishman of good family who married a native and took her to England. Their children were educated on the Continent and did not realize the status of their mother until their father died and she returned with them to New Zealand. Then she went back to her Maori relations. The oldest daughter was

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engaged to an officer in the British army, but broke her engagement when she found out about the roots of her family tree.

The Maoris now own about five million acres of land in the Dominion, by far the larger part of it in the North Island. They are fairly good farmers, though inclined to be indolent. Sometimes a native will sell some of his land, take the cash, and live high while it lasts. The less educated man who comes into money usually gets himself a high-powered car and a loud checked suit; he buys his wife an expensive fur coat and makes all the display possible. The natives are protected by the government through special land boards, which will not allow a Maori to part with all his land.

CHAPTER XXXIII

MUTTON AND BUTTER FOR LONDON TABLES

TEW ZEALAND is one of the leading sheep countries of the world, and Christchurch is its mutton metropolis. It is a South Island city of more than seventy thousand people, situated near the sea on the Canterbury Plains, the breeding ground of the sheep that have made New Zealand mutton famous.

Though so small, the Dominion ranks sixth in the number of its sheep. Thousands of carcasses are frozen in this country every year and a fleet of steamers is always moving over the oceans carrying delicious mutton chops and roasts to the tables of England. The distance to London via the Panama Canal is more than eleven thousand miles. It is even farther by the Cape of Good Hope or the Suez Canal, but nevertheless both the cost of rearing the sheep and the freight charges are so low that New Zealand mutton can be sold in London for less than that raised in England itself.

Let me give you some idea of New Zealand's sheep industry. It is the one out of which the country makes the most money, though dairying is now a close second. There are in the Dominion about twenty-two million sheep, or enough to give every man, woman, and child a flock of eighteen. Although only one thirtieth the size of the United States, New Zealand has nearly half as many

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sheep as we have, and its wool production is proportionately much greater than ours. It exports annually fiftyfive million dollars' worth of frozen mutton, five million dollars' worth of tallow, and fifty-five million dollars' worth of wool.

There are sheep farms everywhere. I have visited many of them and have found them much better kept than similar properties in the United States. They are divided into large fields fenced with wire. This is primarily a grazing country, and its future seems to be in sheep raising and dairying. The New Zealand farmer does not have to house his stock. The soil is fertile, and there is abundant rainfall, so that he can produce meat at much less cost than if he lived in a land of droughts, scanty grass, and more severe winters. Sixteen million acres have been sown in grasses and the greater part of the crops grown is fed to sheep and cattle.

In Australia sheep are reared chiefly for their wool. Here they are bred for their meat as well. The discovery that Canterbury mutton could be frozen and shipped to England where, because of its delicate flavour, it commanded high prices, revolutionized farming in the Dominion. Formerly sheep had been fed on wild grasses and raised for their wool and tallow. When it was realized that native mutton could be marketed abroad at a profit, special studies were made of the kinds of food producing the best meat and the grazing lands were intensively cultivated for fodder. The absence of sour swamp grasses and weeds in the pasturage of the country has been suggested as a reason for the fine flavour of its mutton.

New Zealand mutton won its reputation as Canterbury mutton, though by no means all of it was even then raised

on the Canterbury Plains. The South Island was, it is true, the cradle of the industry, which now flourishes over the whole of the Dominion, but there is said to be no finer sheep country in the world than the limestone downs of Hawke's Bay on the North Island. Many of the sheep stations are very large, for it has been found that it is best to have only two or three animals to an acre of pasture land, and some of the flocks number five thousand, ten thousand, and even twenty thousand head. The size of the average flock from year to year is about one thousand.

The chief breeds of sheep are the Lincolns, the Leicesters, the Corriedales, the Southdowns, and the Romneys. The Lincolns thrive best on the wild lands and hills of the North Island, the Romney Marsh on moist soil, and the Merinos on the dry plains. The best mutton sheep are cross-breds, which are known as freezers.

There is an old saying that you can't get blood out of turnips, but the New Zealanders do it by feeding them to sheep. In fact, practically every good chop I eat here is mostly turnips, and the people tell me that turnip-fed sheep produce the best mutton. In buying a sheep farm the first question asked is whether the land will raise turnips, and if so the price is much higher than it would be otherwise. Turnip fields are to be seen on every land-scape, of which they often form a striking feature. The crop grows luxuriantly and forms a carpet of bright green. Later on, when the sheep have had their first chance at it, the green has all disappeared and in its place there is a great bed of black soil covered with white balls in rows. The field looks as though it had been ploughed and sown with billiard balls. I have watched the sheep biting these



Most of New Zealand's butter is sold abroad on the coöperative basis, the farmers and the creameries dividing the profits. None can be exported until it has been graded by a government expert.



The tattooed chieftain has almost entirely disappeared, but in the past the Maori men used to cover most of their faces and bodies with ornamental spirals. The women were tattooed only on lips and chin.

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balls. They eat them out of the ground, digging away until even the roots have disappeared. Sometimes the farmers dig up the turnips and feed them to their flocks. Alfalfa and mangel-wurzels, a coarse kind of beet, are also grown for fattening sheep.

On the larger estates the sheep are kept in enormous fields, and a few hands suffice to care for a flock of thousands. Like most of the workers of New Zealand, the shepherds are unionized and their wages and hours have been established throughout the industry. In some cases their employers add to the regular wages by paying a bonus at the close of the season. I met one man who told me he gave each of his hands fifty dollars when the hardest of the work was done.

The shearing, which usually begins in September and lasts until January, is done by machinery. A gang of shearers will work through a district with their machines, going from farm to farm like wheat harvesters or a threshing crew in the United States. Some of the farms have their own shearing sheds, but often several sheep stations will own one in common, to which all the flocks are driven. Occasionally shearers come over from Australia, where the season is earlier, but they are more often New Zealand men with small farms of their own or some other occupation for the rest of the year. They are organized, of course, and are veritable autocrats, with the power of financial life or death over the wool growers. If the farmers wait until late summer for the clip, the fleeces get full of seeds from the grasses on which the sheep feed, making "seedy wool," which brings poor prices. It does not pay the farmer to quarrel with the shearers when the summer suns of January are ripening the grass seeds.

The wool clips vary greatly according to the breeds of sheep. The Merino fleeces range all the way from four to seven pounds each, while the Leicesters will average ten pounds and the Lincolns about eleven pounds. There are sheep which produce from twenty to thirty pounds of wool at a clip, but these are exceptional.

Though not so numerous as in Australia, rabbits are among the pests of the New Zealand sheep districts. They were introduced into the islands as pets and with the idea also that they might furnish meat. They increased so rapidly that they threatened to overrun the whole country and eat up all its pasturage. Millions of dollars have been spent in killing them or in fencing them out of the sheep lands and the government distributes poisoned oats from its various agricultural stations to help the farmers destroy them. Trapping rabbits for their skins has become an important industry, in which many men are engaged, and this has tended to make them less of a menace to the sheep runs. Exports of rabbit skins now bring in between two and three million dollars annually. Most of them go to Great Britain and the United States where the fur is manufactured into felt hats. It takes the fur of six rabbits to make a man's hat. Considerable numbers of frozen rabbits are also shipped from Dunedin to the world's markets.

But let us go to one of the refrigeration plants and see just how mutton is prepared for London dinner tables. New Zealand has fifty meat-freezing plants, and the largest and oldest of all is here at Christchurch. It is known as the Belfast Freezing Works and is a coöperative institution, the sheep owners being the principal stockholders.

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We take a car and ride out to the works, which are within a few miles of Christchurch. The buildings consist of great sheds surrounded by paddocks filled with sheep ready for killing. Near by are drying yards, which at first sight seem covered with snow, but as we get closer we see that they are spotted with great piles of newly washed wool. We are first taken to the sheep yards where we watch the men drive the animals up a runway to the killing station on the second floor. Several old sheep are used day after day and year after year as the advance guard to lead their brothers to slaughter. They start the procession, and the thousands behind, sheep-like, follow them, Often ten thousand sheep pass up that roadway in one day.

The sheep are killed at the rate of ten every minute, and it is only seven minutes from the time the live sheep is seized until it is ready for freezing. There is a long string of carcasses steadily flowing out of the killing station into the cooling room and later on from there down to the freezing chambers, where the temperature is eight degrees above zero.

In three days the sheep are as hard as stone. Tap one of the carcasses as we stand in a freezing room. It resounds like a drum. Take one down and rest it on the floor; it is so stiff that it stands alone. My fingers feel frost-bitten as I take notes, and we are glad to get out.

After a look at the freezing machinery, which the manager tells us came from America, we go to the other departments of the works to see what is being done with the by-products. In one place sheep tongues are being canned to be shipped all over the world. The cooking is done in great vats in which the water is kept boiling by steam

pipes. The white tongues bob up and down in the boiling water and from time to time bare-armed men take some out with pitchforks and put others in their places.

In another room we see workers rendering fat; in another they are dressing the sheep heads, and in others they are pulling wool from the skins and spreading it out to dry. A curious department is that where the blood and bones are made into fertilizer. The dried blood is roasted in a great cylinder several hundred feet long. On the floor I see a pile of blood as big as a small haystack. It smells like ammonia, and my eyes water as I look.

This blood is very valuable for manure. For a long time it went to waste in most of the slaughter houses and freezing plants of New Zealand. Then some Americans came down and made a contract for the product. The New Zealanders soon saw that the foreigners were making a good thing out of their blood money, and concluded to take the profit themselves. When the time came for the renewal of the contract they refused, and now, I am told, this and the other by-products of the Christchurch plant pay about all of the expenses of its operation.

As we walk through the works I ask the manager to tell me about his labour and costs. He replies that the average earnings of the men are about twenty-five dollars for a forty-four-hour week. Except on Saturdays the men come to the factory at eight o'clock in the morning and work until five in the afternoon, taking an hour off for dinner. They have in addition to this what are called "smoke-o's." These are recesses of ten minutes twice a day for a smoke. The foreman fixes the times, which are usually ten o'clock in the morning and three in the afternoon. These smoke recesses are common in all



New Zealand will probably remain an agricultural country, dependent on sea traffic for her manufactured goods. She has plenty of deep bays and inlets for harbouring even the largest ships.



To the sheep station owner the rabbit is an unmitigated evil, but to trappers, freezing works, and skin exporters, it is a valuable animal.



The volcanic cone of Mount Egmont looks down on Taranaki, one of the world's richest dairy regions. New Zealand's climate is so mild and her pasturage so good that stock can feed outdoors the year round.

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New Zealand factories. In places where many women are employed, they stop work for tea every afternoon.

As far as I can see, the men seem contented with their jobs. Many of them own little cottages near the works, the average working man's house costing about twenty-five hundred dollars. The manager tells me that if a man is ordinarily economical he can pay for his home in five years, and that most of the men save money. He says that the factory insures the lives of its employees upon such terms that if they are killed while on duty their heirs will receive from fifteen hundred to twenty-five hundred dollars, according to the amount of their policies.

Handling the wool clip of New Zealand is another big business in the Dominion. As yet only a small proportion is kept at home to be used by her factories. The mills take around seven million pounds in a total production of nearly two hundred million pounds. New Zealanders say that they do not expect they will ever be serious competitors with the woollen mills of old England. They declare that they prefer to maintain the present high standard of living for the working classes rather than bring in cheap foreign labour for factories. There are but twelve woollen mills in the country and only three of these, the ones at Petone, Kaiapoi, and Dunedin, are large establishments. The Kaiapoi mill is near Christchurch and is famous for making the most beautiful travelling rugs in the world.

The Kaiapoi mills employ many girls. They are healthy, rosy-cheeked, and well dressed, and hundreds of them ride to and from the factory on bicycles. They work eight hours a day, their wages being about eleven dollars a week.

Next to sheep raising, dairying is the great farming industry of the Dominion. There are in the two islands more than a million dairy cows and heifers and the government does everything in its power to encourage the breeding of fine stock and the production of good milk, butter, and cheese. It advances money to dairy companies for acquiring land and machinery and setting up buildings. The loans must be repaid within fifteen years, and the rate charged is five per cent.

There are numerous coöperative butter and cheese factories to which the farmers take their milk. Here it is inspected for its purity and tested for its butter fat. The producers are paid on the basis of the fat content, and dirty milk is, of course, refused. Some of the plants close for three months every year, but many of those in the best dairying regions keep going the year round, making either butter or cheese as season or market demands. New Zealand exports annually in the neighbourhood of twenty-five thousand tons of butter and sixty thousand tons of cheese, worth approximately sixty-five million dollars. Most of this cheese and butter goes, of course, to Great Britain, but increasing quantities are being shipped to Canada, and in spite of our high tariff, some of it finds a market in the United States.

All meat and dairy products exported from New Zealand are inspected and graded by government agents. The official standards are so high, and the inspectors have done their work so well, that their stamps are accepted as absolute guarantees of quality and weight in the markets of the world. In fact, New Zealand butter and cheese now rank with the output of the famous Danish coöperatives. The meat-export trade is entirely controlled by a

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government board, on which the producers themselves are represented, and no foreign sales or shipments can be made without its approval. It maintains a permanent agency in London where the bulk of New Zealand mutton is sold.

CHAPTER XXXIV

SOME FREAKS OF NATURE

INDBAD, the Sailor, the bird expert of the Arabian Nights, should have come to New Zealand. Here he would have found a bird as tall as a giraffe that laid eggs as big as a pumpkin. Sindbad was never able to prove that his roc really existed, but if you will come out to New Zealand, you can see for yourself remains of its giant bird, the moa. There is a stuffed one at Christchurch, besides the skeletons of a dozen others. I have examined the real eggs the moa laid when it trod the soil of this country a century or so ago.

The great moa is supposed to be the biggest bird ever created. I sat down before the huge model of it in the museum at Christchurch and made these notes: "If I were to stand under the bird its tail feathers would tickle the top of my head. Its ankle is as big around as my calf and its gray body is the size of a small haystack. Its tall, thin neck is stretched so high above its breast that Barnum's circus managers would have had a hard time getting the animal into a freight car. Its legs are as strong as those of a camel, and it looks quite as big as the biggest 'ship of the desert.' Its enormous feet have claws much like those of a turkey, save that each is a foot long. I doubt not the moa could have stamped out the life of a man at one kick." Beside one of the skeletons is placed



Next to the kauri pine, the totara is the most valuable timber tree of the Dominion. The country has been denuded of so much of its forests that conservation policies have become necessary.



On the slopes of Mt. Cook near the Tasman Glacier the government has established a sanctuary for the kea parrot, which is elsewhere destroyed on sight because of its sheep-killing habit.

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the skeleton of an ordinary man. The head of the bird rises at least eight feet above the skull of the man.

The bones of the moa were first discovered about eighty years ago, and later great quantities of them were found. The bird existed in New Zealand within a comparatively recent period and there are Maoris who say that their forefathers knew of it. The probability is that it was here long before the Maoris came, and there is no doubt that it was once hunted and eaten in great numbers. In old ovens that have been excavated bones of cooked moa have been found. But as for who the moa hunters were and when they lived, no one knows.

The moa eggs were each about a foot long. One was found some years ago by a labourer digging the foundation of a house. He had gone down several feet when he came upon the skeleton of a man in a sitting posture. The egg was held in the skeleton's bony fingers in such a manner as to bring it immediately opposite the mouth, and it is supposed that it was placed there with the idea that the ghost of the dead might have something to eat during the intervals of his long sleep. The stone spear and axe by the side of the man showed that he was probably a warrior, and his skull bore evidence of having received several hard knocks, possibly on the battlefield. The egg was ten inches long and seven inches in diameter and its shell was about as thick as a twenty-five-cent piece. It was perfectly empty, but whether time or the dead warrior had sucked out the contents the records do not say.

Though a bird, the moa had no wings. It seems to have been a giant edition of some of the strange birds New Zealand has now; for there are to-day in the Dominion wingless birds not larger than good-sized chickens. I re-

fer to the kiwis, some of which I have seen alive here at Christchurch. I have had several of them in my hands, and by feeling carefully I found what seemed like a little lump on each side where the wings ought to be. Some say that the kiwi is without wings because the dense growth of the New Zealand bush prevented its flights and so, through the ages, it lost its wings for lack of use. It makes up for this deficiency, however, by its swiftness of foot. It runs very fast, with its body held in an oblique position and its neck stretched forward. This bird has hair-like feathers of somewhat the colour of a quail, and a long bill, sharp at the point, with which it can bore down into the mud for worms. Its legs are much like those of the moa.

The kiwi is a night bird. At Canterbury College, where I saw them, the birds were penned up like chickens and had to be brought out of the coop for me to examine them. They seemed almost blinded by the light and ran about this way and that in apparent terror. Kiwis are becoming scarce in New Zealand, for the Maoris are fond of them as food, and their feathers are highly prized for cloaks. They are now to be found only in the dense beds of ferns covering parts of New Zealand. It is difficult to catch them, for they look much like the dead fern leaves and take refuge in crevices in the rocks and in the deep holes that they dig in the ground for their nests. They used to be hunted with dogs.

One of the most curious things about this bird is the size of its egg, which is almost as big as the kiwi itself. It is a creamy white colour and as smooth and as glossy as ivory.

Another New Zealand bird quite as strange as the kiwi 248

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is the kea parrot, which kills sheep. Thousands of sheep have been destroyed by these birds, the loss from them being so great that the government pays a bounty of one dollar a head. As many as fifteen thousand keas have been killed in a year, though they are no longer as numerous as formerly. The kea has fastidious tastes. It does not care for any part of the sheep except the kidneys and the fat surrounding them. It has become as expert in anatomy as a surgeon and has learned just where the sheep's kidnevs lie. I am told that it strikes the right spot every time. Fastening its talons into the wool on the animal's back it bores with its bill into the side of the sheep directly over the kidneys, making a hole as smooth as though the flesh had been cut round with a knife. The kea tears out the kidneys and the fat, and then leaves the sheep to die in great agony.

There are different theories as to how keas acquired this strange taste. Until sheep were introduced into New Zealand the birds had lived on berries and insects. Then they began to pick the meat from the sheep skins hung up to dry. Later on they attacked the live sheep, and after a time, having discovered the kidneys, ignored every other part of the animal. Whether the birds talk to each other or not I do not know, but they hand on to one another as effectively as though they had a language their gruesome way of butchering sheep.

There is one place in the Dominion where the kea's life is safe. This is at the Hermitage, on the sunny slopes of Mount Cook, where the government maintains a sanctuary, in order that this parrot may not become entirely extinct. The Hermitage is the starting place for those who try to scale New Zealand's loftiest mountain, and

some of the people who have stayed there bring back stories of the doings of the keas. They are great thieves, and one woman tells how her moccasins were stolen from the windowsill of her room. Others complain of being kept awake at night by the keas squawking and clawing up and down on the corrugated-iron roof of the hotel. If the birds get hold of a pillow they will tear it all to pieces, perhaps thinking that inside the soft substance they will find some of the kidney fat they love.

Kiwis and keas are, however, but a few of the freaks that Mother Nature has placed in this out-of-the-way part of the world. There are others so strange that I hesitate to mention them. In New Zealand there are no kangaroos, but there are marsupial rats here, and I saw at the college a mouse not much larger than a good-sized cricket with a pouch for bringing up its young. This mouse, which is one of the smallest marsupials known, is now very rare. It is a part of the biological collection of the college museum at Christchurch, and was shown me by the chief biologist. He showed me also a live lizard, the tuatera. which is a descendant of a family of three-eyed lizards. The third eye is in the middle of the head and is clearly visible through the skin of the young animal, but becomes thickly covered when he reaches maturity. The scientists say there is little doubt that this eye was once used. The lizard I looked at was about a foot long, and, I should say, measured two inches in diameter.

But better than the mother mouse and the three-eyed lizard, I liked the black swans of New Zealand. They are to be seen in all parts of the islands, and one can shoot them anywhere around the lakes. They are even more beautiful than the white swans, and as they sail along in

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the water their feathers look just like black plush. Then there are the swamp hens which, with their bright blue bodies and red legs, look, as a woman who had been in the United States said to me the other day, "like your Mystic Shriners on parade."

I must not forget to mention the strangest pet any country ever had. This was a dolphin, the only whale I ever heard of which had its own special act of Parliament. When passing through Pelorus Sound on the trip between Wellington on the North Island and Nelson on the South Island one always hears the story of "Pelorus Jack." He was a big silvery gray fellow, different from all the other whales in these waters, and he had a habit of going out to meet incoming ships. He would escort them for miles and then go back to his own haunts. He would play about the vessels and even rub himself against their sides, and one theory was that he came to the boats so as to rub his back against their keels, and thus rid himself of parasites. Another was that he loved playing in the waves ruffled up by the ships.

The fame of "Pelorus Jack" spread until there were tourist trips into the Sound to see him and Parliament passed a law to protect him, for there was always a fear that some of the whalers in these waters might kill him. In fact, it was said that one ship injured him and that he would never meet that steamer again. But at last he disappeared. Some hold a party of Norwegian whalers responsible for his death, while others believe he was killed by one of the mines sowed by a German raider during the World War. Perhaps he merely died of old age, for the Maoris claim that he was not under two hundred and seventy-five years old. Once, it is said, he had a mate,

but, if so, he never brought his wife out to greet the tourists.

New Zealand has some curiosities of vegetable life quite as remarkable as those of her animal world. One of the strangest is what is known as the vegetable caterpillar. This looks like a real caterpillar, two inches long, with a sprout, like a horn, growing out of its head. When it is full grown the sprout comes out and takes root and becomes a vigorous plant about eight inches tall, with a single stem, but no leaf. The only one I have seen was a plant that had been dried after being taken out of the ground.

I might also speak of New Zealand flax, which I have seen at many places on the islands. This flax, which grows wild and on swamp lands, has thick blades about two inches wide and five or six feet long. In the middle of the clustered blades grows the tall, straight flax stick with seed pods at the top. The upstanding New Zealand men are often called "flax sticks." When the blades are harvested, at intervals of three years, the green covering is stripped from them, leaving the fibre exposed. This is washed, hung up to bleach, and then made into tow and cordage. It competes successfully with the hemp of Manila, and thousands of tons are exported every year. Of late years the flax fields have suffered from a small fly which makes holes in the leaves and so reduces the quantity of good fibre. Since it has been found that drained swamp lands make the richest dairy farms, it is a question whether it is best to drain them for cattle runs or leave them to produce flax.

A product almost as valuable as flax in the export trade of the Dominion is kauri gum. It is a solidified turpen-

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tine, or fossil resin, which is found in great chunks in the ground in the North Island. The lumps may be the size of a walnut or as big as a man's head, and single pieces have been found weighing as much as one hundred pounds. It is often as clear as amber, but varies greatly in colour. Sometimes it is a rich yellow, sometimes brown, and sometimes just the colour of champagne. Some of the best of it is sold to the manufacturers of varnish and linoleums, the bulk of it being sent to the United States. Kauri gum is by no means a cheap article, selling for more than four hundred and fifty dollars a ton, and the annual export is worth nearly two million dollars.

Hundreds of men go over the kauri forests with spears and picks looking for this gum. They drive their spears down into the earth and when they strike a piece, dig it out. The gum lies within a limited area, consisting of about seven hundred thousand acres north of Auckland and about thirty thousand acres southeast of that city. Part of this is government land, upon which the right to dig kauri is sold at so much a year.

Most of the diggers are Austrians, but some are Maoris and some English-Australian settlers. The Austrians make a regular business of hunting kauri and work in bands of thirty or more. The settlers dig for the gum when they are not farming, and the Maoris seek it to supplement their funds when food runs low. Many of the Austrian gum diggers make more than twenty-five dollars a week.

This gum appears on the kauri pine, a tree that often grows one hundred and fifty feet high and twelve feet in diameter. The kauri is about the best timber of New Zealand, and is used largely in building and furniture

making. The gum comes from the great forests of the past which have rotted away. Some of the standing kauri trees are bled for their resin like our turpentine forests of the southern states, but this method is illegal, and most of the product is still obtained from the deposits in the ground.

Kauri gum is used by the varnish and linoleum manufacturers because it assimilates oil easily and at low temperatures. As the New Zealand deposits are worked from year to year the gum gets more and more expensive and in anticipation of their giving out the question of substitutes has been studied. China-wood oil, extracted from nuts, and exported from Hankow, China, is now being extensively used and has become a keen competitor of kauri.



Kauri gum is the fossilized resin of the kauri pine forests of the past. It is dug from the ground, and most of it is exported to the United States to be used in the manufacture of varnish and linoleum.



We call a tall, straight person a "bean pole," but the New Zealanders say he is a "flax stick," borrowing their comparison from the seed-bearing stalk that rises from the centre of the native flax.

CHAPTER XXXV

AMERICAN GOODS IN NEW ZEALAND

N THE foregoing chapters I have mentioned two facts that should mean much to the exporters of the United States. One is that New Zealand is an agricultural country, exporting raw materials and importing manufactured articles, and the other is that the per-capita wealth of all persons of more than twenty vears of age is about four thousand dollars. In other words, New Zealand is dependent on foreign markets as outlets for her rich agricultural production, and on foreign factories to supply her needs for finished goods, and she has the money to pay for what she wants. The total foreign trade, imports and exports, comes to more than four hundred dollars a year for every one of her people. This, the New Zealanders claim, is the highest per-capita foreign trade in the world. In some years half the amount has been spent for goods brought in from other countries.

In travelling here one sees everywhere evidences of prosperity and a high level of comfort. The people are well dressed and live in modern, well-built houses. Unlike Australia, New Zealand has a big rural population, and about half the inhabitants live out on the land or in country villages. There are only four cities of any size, but there are a hundred towns of one or two thousand, and perhaps a dozen ranging between two and ten thousand. All are up to date in their conveniences and equipment.

The New Zealand cities have their theatres, libraries, and stores, their banks and their factories. Each has its cricket club and its recreation grounds, and the people devote a large part of their time to amusements and sports. The short working day gives leisure to the wage earners. They leave their jobs in time to dress for the evening, and take their families to the movies, where they often see American films. During the half holiday they spend more money than if they were at work.

In proportion to its population, Auckland, the commercial metropolis, has more rich men than any other city in New Zealand, although Wellington, the capital, is growing the fastest. On the South Island, the largest city is Christchurch. It is on the famous Canterbury Plains, "The Garden Spot of New Zealand." South of it is Dunedin, with a population of sixty thousand. Christchurch and Dunedin are rival towns, the feeling between the people of the two places being much the same as that between the populations of Minneapolis and St. Paul. Christchurch was founded by a group of Church of England settlers, who gave it its religious name. Dunedin was started by Scotch Presbyterians at about the same time, and in its early days it was by no means safe to question election, justification, sanctification, or infant damnation within its precincts. The Scotch colonists wanted to name this settlement after their capital at home. But there were so many Edinburghs in the world that they decided on the Celtic name for Edinburgh and called the place Dunedin.

To-day nine tenths of the people of Dunedin are of Scotch descent and the place is a magnet for Scottish immigrants. There are Scotch names over the stores, Scotch

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names for the streets, and the little stream that runs through the north end of the town is called the Water of Leith. When I asked a rosy-faced boy the name of one of the churches, he replied with a thick brogue:

"That, sor, is the Fierst Kirk."

The Dunedin men say that their churches are far better off than those of the rival city. They are all out of debt and have money in the bank. When the city was founded one tenth of all the land was set aside for the Church. This is leased out for twenty-one years at a time, on condition that at the close of each such lease all improvements made shall belong to the Church.

Dunedin is in the rich Otago Province, which irrigation has made into a great fruit-producing region. Grapes, peaches, pears, nectarines, and several kinds of nuts are raised in abundance. For a time the industry suffered from the great numbers of birds, but the importation of the German owl, which killed off most of them, solved that difficulty. Dairying and sheep raising are carried on almost as extensively as on the Canterbury Plains, and the farmers raise four good crops of alfalfa in a year.

There are four big woollen mills in the neighbourhood of Dunedin and here also is one of the car shops of the government railways. Another local industry is the freezing of thousands of rabbits for export.

Our trade with New Zealand is rapidly increasing. Every year we sell her goods valued at nearly forty million dollars, or more than eighteen per cent. of the total imports. Great Britain has the bulk of the trade, but the United States comes next, and then Australia. There is no doubt that we might double our share if we tried hard enough. I have met a number of American salesmen, all of whom

say that they are doing well. They are, however, somewhat handicapped by the bad impression created by that class of our commercial travellers who are for ever bragging of their country and over-praising their goods. This is particularly distasteful to all New Zealanders and especially so to the business man. On the whole, however, the people like our goods and are friendly to the Yankees, as they call us.

Take, for instance, a salesman I met the other night in the chief hotel at Dunedin. He has been selling goods here and in other parts of Australasia during the past five years. Said he:

"American goods are fast making their way in this part of the world. I am the agent for several large companies and am doing well. We are selling printing paper by the ton. There is a good demand for farming machinery of all kinds, and tens of thousands of acres of sheep pastures are enclosed in fences of American wire. Our automobiles are the most popular and the country is alive with 'flivvers.' The New Zealanders bought ten million dollars' worth of our cars in a single year, to say nothing of four million dollars' worth of tires. They have spent as much again on our gasoline and oils. American bicycles are sold everywhere, and in spite of their higher prices our carpenter's tools are preferred to those of Europe. Recently I took a big order for steel rails. We have also a good business in electrical supplies."

The government is undertaking to develop New Zealand's water power. It has picked out no less than seventy-two sites for hydro-electric projects, and it has a big programme under way. The Lake Coleridge plant, seventy miles from Christchurch, serves a population of



As in every other country where modern farming methods prevail, American agricultural machinery is much used in New Zealand. So also are our automobiles, tires, and small tools.



Among the many good dairy herds of the Dominion, Ayrshires, Jerseys, and Holsteins are the favourite breeds. Tons of the finest cheese and butter are annually exported.



Refrigerator ships, sailing overseas with New Zealand's frozen mutton, have revolutionized her farming. Instead of being raised on wild grasses for wool and tallow, as formerly, the sheep are now fattened on cultivated forage crops.

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more than one hundred thousand, and enables Christ-church to have a two-cent fare on its municipally owned street-car lines. The Waikato plant, seventeen miles from the town of Cambridge in the North Island, can generate eighty-four hundred horsepower; and the Waipori Falls project furnishes eighty thousand horsepower for the city and the factories of Dunedin. Extensions of these three plants are being pushed, and the government has plans for other installations which will give electric energy to practically all the towns and rural districts of the North Island. Such projects should mean more business for the electrical-supply firms of the United States.

Our firms are selling Connecticut clocks, Illinois farm machinery, and Massachusetts watches. I saw American typewriters in Wellington. There is a good market for all sorts of Yankee notions. The other day while riding on a train with a New Zealand merchant, I asked him what he thought of American goods. Pulling his right foot from under his travelling rug, he put it up on the seat beside me.

"You see those shoes?" said he. "They are American. They are the easiest shoes I have ever had on. They have not troubled me a day since I bought them."

The New Zealand government is one of the chief customers for manufactured goods. It owns the railroads, builds bridges, and operates coal mines. Hence, its purchases are enormous. It buys all sorts of iron and steel building materials, as well as hardware, galvanized roofing, elevators, irrigation pumps, and all kinds of machinery and engineering apparatus.

We now have the best consular service of any com-

mercial nation, and New Zealand offers a splendid field for its operations. Times have changed both in this Dominion and in Australia, since the day typified by the young man who got himself appointed consul at Melbourne. His only business experience had been as postmaster in his little home town in Wisconsin. He was asked by an American why he did not keep the State Department posted on the openings for American trade, and on the big business developments going on everywhere. He replied that he reported upon all things that the department directly asked for, but that he did not consider it best to advertise the great trade opportunities of Australia for fear it might call them to the attention of other nations.

New Zealand buyers give to British firms as many orders as they can, without too great a sacrifice of their own interests. This is especially true since the World War, as the people are anxious to do what they can to stimulate British trade and thus help the mother country pay her enormous debt and regain prosperity. I find here a strong love for Old England. Many New Zealanders, even those born and bred here, speak of a trip there as going "home," and of British articles as goods "made at home." The Dominion appears entirely content under the British Crown, doubtless because the bonds binding her are not tight. For example, in the World War, Great Britain could not have conscripted soldiers from the Dominion as France did from Algeria. It was the people themselves who decided in favour of compulsory military service, though not until many thousands of young men had already volunteered and gone overseas. In Australia, conscription was defeated by the voters of the Commonwealth.

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I recently visited Invercargill, the town farthest south on this side of the world. It is the bottom city of the Pacific, far below the latitude of Cape Town, at the tip of Africa, and almost as far south as Punta Arenas at the tail of South America. It is at the extreme south of New Zealand, and as nice a little city of fifteen thousand people as you will find anywhere. The town is as well built as any of the same size in the United States. It has water works, good schools, a public library, and a beautiful park, upon the waters of which swim half-a-dozen jet-black swans.

Walking through the streets, I stopped at an agricultural implement store. It was filled with farming machinery, and I noticed that at least half of the stock was American. There were several Chicago drills, two Ohio harvesters, and some Illinois ploughs. I talked with the proprietor. He said he had a good sale for American reapers, and all sorts of American farming tools, but that the British and Canadians are trying to crowd us out of the market. Said he:

"One of your chief competitors is Canada. The Canadian firms will sell on longer time, and we can get better prices for their goods on that account. We have to give a discount for cash, and cash sales are much harder to make."

On the same street I saw American bicycles in a shop window, and farther up, American handsaws. At present most of the cottons sold here come from England, but the people are beginning to buy our print goods. I saw some in a Wellington dry-goods store and asked the merchant where he got them. He replied that he had given an American firm a trial order, and that they were selling

well. He showed me his invoice. It was for eight thousand dollars, and this he called a trial order. Most firms in the United States would consider it a pretty good one. But this part of the world is so far away that the merchants must buy a whole season's stock in one consignment. And there is no chance for a re-order.



Coconuts are common to all the islands of the South Seas, and provide the chief source of income. Niuafoou, an outlying island of the Tongas, is said to grow the largest in the world.



Rubber growing is proving profitable in the Fijis, and nurseries have been established for raising the young trees. The Fijian's inborn dislike of work has often made it necessary to import labour for the plantations.

CHAPTER XXXVI

THE FIJIS AND THE TONGAS

HE ports of Australia and New Zealand swarm with sea captains, traders, and others, who know the South Seas as you know the palm of your hand. The Canadian Pacific steamers plying between Vancouver and Sydney by way of Hawaii call at the Fijis, and the Tongas are easily reached from Auckland, New Zealand. During my stay in these waters I have had the many talks about these far-away islands that form the basis of what follows.

I have spoken of the Tongas as being easily reached from New Zealand. This seems a strange statement when I tell you they are about as far from Auckland as New York is from Cuba. Distances mean little in the South Seas, however. The Fijis are eleven hundred miles from Auckland and the Tongas are only a few hundred miles nearer, yet New Zealand once wanted them put under its government. The idea was to establish here a British Island Empire which should be two thousand miles in length, or longer than the distance from Canada to the Gulf of Mexico. The project fell through, and the two archipelagoes are still crown colonies, the Tongas being under the British High Commissioner for the Western Pacific, who is also Governor of the Fijis.

There are men still living who can tell stories of the days when the Fijians were the most bloodthirsty cannibals on

earth. They made human sacrifices, and widows were burned on the funeral pyres of their husbands. When a chief built a home he planted a living victim under each post, and when his canoes were launched he used men as rollers upon which the craft slid down into the sea. When he died his wives were strangled to line his grave; such a thing as killing a baby was too common for notice.

The last king of the Fijis, Thakombau, was the son of Tanoa, a notorious man eater. Thakombau himself was something of a cannibal, but his father craved human flesh as a matinée maiden craves candy. He sent his war canoes about the South Sea Islands for victims, and they often brought back cargoes of dead men, women, and even babies. Upon their return everyone joined in a feast of human flesh.

One can still see on the islands the ovens in which the cooking was done. They were filled with red-hot stones, and it is related by the missionaries that victims were often roasted alive. At one time fifty bodies were cooked, and at another eighty women were strangled for a single feast. Whenever the stock of dead enemies ran low, the king used to send his men to the watering places to lie in ambush for fishermen or for women who had gone down to bathe.

King Thakombau killed his first victim when he was six years old, and he was famous as a cannibal until the time of his conversion by the missionaries. It was after he reformed that he made the treaty which gave these islands to England. The story of this treaty is interesting. The home of a white trader named Williams, who was acting as United States consul to Fiji, was burned, and the natives stole some of the furniture and stores while

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the house was ablaze. Williams demanded three thousand dollars damages. The Fijian king refused. Then Williams got the backing of the United States government, and finally the sum of forty-five thousand dollars was demanded. It was out of the question for the savage king and his subjects to raise this sum, so when certain moneylenders of Australia offered to settle the claim in return for two hundred thousand acres of his best land. Thakombau joyfully accepted. But the British government would not permit this transaction. Thereupon Thakombau agreed to cede the Fijis to Great Britain if she would pay the debt. A commission visited the islands and reported adversely on the proposal, but in 1874, convinced that the islands needed the rule of a civilized power, the British made a treaty with Thakombau annexing his whole domain. Meantime, the claim of the United States had been allowed to drop during our Civil War, and was never revived.

Though no longer master of the Fijis after the British took possession, Thakombau continued to live in royal state. At his death his mantle fell to his son, the high chief Ratu Epele Nailatikau, who kept up all the show of royalty. He possessed no real power, but he made the natives treat him with the most abject respect. Only the highest chiefs were permitted to enter his house at Mbau, and even they must crouch silently against the wall and await his invitation to speak. Whenever he was through smoking a cigar, he would indicate by a nod which chief might have the honour of finishing the butt. A new clean mat was unrolled for his dinner table about which crept the men and women who bore him food. No commoner was allowed to eat in his presence.

Canoes loaded down with yams, coconuts, turtles, and yaqona root for making the native drink, kava, were constantly landing at Mbau. The offerings were carried humbly to the door of Ratu Epele and the natives crouched outside, gently clapping their hands, until their tributes were graciously accepted. In the days of his grandfather, Tanoa, any island that failed to furnish the expected tribute was frightfully punished. When the people of the island of Maliki, designated to provide turtles for the king, so far forgot themselves as to eat some of their catch, Tanoa sent a fleet of war canoes. Every man and woman on the island was killed, while the children were taken captive to Mbau so that the boys there might earn their titles as killers of men by clubbing them to death.

The Fijians of to-day are among the most civilized of all the South Sea Islanders. They have been converted to Christianity and have their own native preachers. They are divided among a half-dozen denominations, with the Methodists claiming the largest number of converts. The oldest established church in the islands is that of the Methodist mission founded in 1825.

The missionaries established the first schools in the Fijis and until a few years ago the education of the natives was left entirely to the Methodists and the Catholics. The government now maintains a high school near the town of Suva, where the sons of chiefs are trained, and it also helps other schools that comply with its requirements. At an industrial school near Suva the islanders are taught boat building, iron working, and other manual arts. Boys are entered for terms of five years. Children of European residents are educated at government expense in separate institutions.

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The Fiji Islands were discovered in 1643 by Tasman, the Dutch navigator, the same man who discovered Tasmania and New Zealand. Their area is less than that of New Jersey, and their total population is little more than that of Dayton, Ohio. Only about half the people are native Fijians. For some years their number decreased steadily, but this decline seems now to have been checked. The people are especially subject to epidemics. In 1875 measles was brought into the islands by sailors from a British ship. The disease took a most virulent form and killed forty thousand natives in a short time. Great numbers of them died when influenza swept the world in 1917 and 1918.

The Fijians are strong and well built, and in appearance far superior to our American Indians. They have dark copper skins and frizzly hair, which stands up about their heads in enormous mops, making them seem tall. In order to get their hair to stick up, they plaster it with damp lime, which bleaches it to an auburn shade, so that they look very grotesque. When young, the women are handsome, having pretty eyes and well-moulded faces. In the settled regions they wear loose cotton gowns, but back in the interior the usual attire is a fringe of grass about the waist, a string of beads, and a fan. The men wear about the same costume.

One frequently sees a native with a long pin, or scratcher, thrust through his hair. This weapon is used to make war upon the vermin with which almost every head is infested. Sometimes the irritation gets beyond the scratching point, and in desperation the man so attacked kindles a fire of banana leaves and, lying down with his head near the fire, thus smokes out his unwelcome visitors.

The Fijians are good-natured. They are cleanly and spend a great part of their time in the water. After every bath they rub themselves down with coconut oil, the rancid odour of which enables one to smell a native long before seeing him.

Though they are practically all Christians, the natives cling stubbornly to many of their old customs. One of these is the performance of the fire walkers. On the island of Bega is a circular pit about twenty feet in diameter. The bottom is lined with volcanic stones and when a fire walk is to be staged the pit is filled with dry sticks and a fire is kept up until the stones are red hot. Then the glowing coals are brushed aside and out of the forest comes a procession of young men, their bodies gleaming with coconut oil and garlanded with flowers. Slowly they tread over the hot stones, singing as they go. Then they vanish into the dense woods, apparently unhurt. After they have gone, whole pigs and vegetables are put on the hot stones and covered with leaves and earth. Soon a well-cooked feast is ready for both spectators and performers. Scientists say that the volcanic stones used are poor heat conductors and that they radiate heat quickly. Thus the surface cools sufficiently to permit the fire walkers to tread the stones, though they retain enough heat inside to cook the feast. At any rate, nothing will persuade the fire walkers to step on hot limestone, which is a good conductor and a poor radiator. The thickness of the skin on the soles of the natives' unshod feet no doubt accounts in great measure for the "miracle"

Many natives live in and about Suva and Levuka, the principal towns, but most of them dwell in villages scat-

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tered over the islands. A Fiji village consists almost entirely of thatched huts with walls of woven bamboo built without the use of nails. The roofs are thick and the thatch is so skilfully put on that it seems to be woven. Some of the houses are conical in shape, others oblong, and others oval. The usual hut has but one room, in which the whole family stays in the daytime, when it rains, and where all sleep at night. The bed is a mat on the floor, and the pillow a bamboo log, which is placed under the neck in order to keep the sleeper's headdress well up from the ground. There is but little cooking, as raw fruit forms a large part of the diet of the people.

The chief ports of the Fijis, Suva and Levuka, have steamship service to Sydney, Auckland, the Tongas, and the Samoa Islands. An excursion to Suva, which is also the capital, is a popular winter trip for New Zealanders. Besides the natives, about a thousand Europeans live there, most of them in well-built modern houses. Its chief street, the Victoria Parade, is lined on one side with rain trees whose thick foliage protects one from the sun, and on the other side with hotels and business houses. The British governor has his office at Suva. He lives there like a little king in a palace that cost about a hundred thousand dollars.

The Governor of the Fijis is appointed by the King of England, and gets a salary of fifteen thousand dollars a year, besides the five thousand he is paid as High Commissioner of the Western Pacific. He has a sort of cabinet, or executive council. The laws for the islands are made by a legislative council, of which he is president. There are a large number of district chiefs and native magistrates, and seven of the provinces have resident super-

visors to assist the chiefs. In ordinary matters the native laws and customs are respected as far as possible. There is a constabulary of Fijians and East Indians, besides the defence force, which is composed of Europeans, half-castes, and natives.

Most of the money made in the Fijis comes from sugar plantations and coconut groves. Upon the higher portions of the islands coffee is now being grown, and yields about five hundred pounds to the acre. A large number of tea gardens have been set out, and some planters are making money from rubber.

Each coconut tree has an average yield of a hundred nuts per annum, and brings in about a dollar per year net. At this rate, a grove of ten thousand trees will mean ten thousand dollars a year, and as the trees are set close together ten thousand do not take up any great area. After the trees are once planted, little needs to be done until they begin to bear at the end of from five to seven years. The nuts are broken open and the meat is cut up and dried, to be shipped abroad as copra, for use in making soaps, hair restorers, and "nut" butter.

Nearly all the profitable enterprises in the islands are owned or backed by Englishmen. The chief difficulty that confronts them is the labour problem. Having few wants and being blessed by nature with the means of supplying them without much trouble, the Fijians feel no need to work. Sustained effort they abhor, although in their own way they are industrious, and are the best native carpenters and canoe builders in the South Seas.

It was just a year after the British took over the islands that the measles epidemic decimated the population, so that, what with the decreased number of the Fijians and



Though the largest island in the Samoan group, Savii has few inhabitants. It is volcanic and parts of it are often enveloped in clouds of steam caused by boiling lava rushing down into the sea.



The native church at Apia is well attended, the Samoans being fond of religious ceremonies. Most families also hold daily prayer services in their homes.



At mission schools natives are trained in wood-working and boatbuilding, but the islanders as a rule are not industrious and work only enough to supply their simple needs.

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the natives' distaste for work, the plantation owners had to import labourers. Workers were brought in from India, the Solomon Islands, the Gilberts, and the New Hebrides.

The government regulated the employment of imported labour. It cost about seventy-five dollars to bring in a native from the New Hebrides, and forty dollars to get one from the Gilberts, and the employer had to agree to return the labourers at his own expense at the close of their engagement. It cost more to import the East Indians, but they were usually hired for terms of five years, on the understanding that they should have food free for six months after their arrival, and free lodgings and medical care for the whole term. Their wages were paid weekly, the men receiving twenty-five cents a day and the women eighteen cents.

More and more coolies were imported from India, while the numbers brought from other islands fell off. At the close of their terms of service many of the East Indians took up little plantations of their own, where they grew rice, sugar, coconuts, and bananas. There are now upward of sixty thousand of them in the islands, compared with about ninety thousand Fijians, five thousand Europeans, and a sprinkling of half-castes, Polynesians, and Chinese. As in other British colonies to which they have been admitted, the East Indians have bred a serious race problem, and their further importation has been stopped. They declare themselves as good as the whites and demand equal rights with them. A few years ago half the Indian population went on a strike, which reached such a climax of violence that it had to be put down with military force.

Eighty per cent. of the trade of the Fijis is with Australia and New Zealand, and the total amounts to about

twenty-two million dollars a year. Some of the imports come from the United States. We supply them with timber, oil, hardware, and cheap clocks and watches. The Fijian will use none but an American axe, which he likes because it is light, sharp, and well tempered. He likes also American-made knives or machetes, with blades about fifteen inches long, with which he clears his fields and gathers his bananas and coconuts. The people buy about one and a half million dollars' worth of cottons yearly and there is a demand for canned meats and flour.

As High Commissioner of the Western Pacific, the British governor of the Fijis looks after the Tongas, which lie about two hundred miles southeast of the nearest of the Fijis. They still have a native ruler, Salote, the Queen of the Tongans, who handles native matters through her high chiefs. The government is, in fact, a sort of hereditary monarchy under the British crown.

The Tongas have a total area about one tenth that of Connecticut. The largest of them is only twenty miles long, and many are little more than atolls and coral rocks rising out of the sea. Some of them are volcanic, but their soil is well suited to growing coconuts and sugar. The entire population would hardly make a city of twenty-five thousand inhabitants, and there is only one town, Nukualofa, the capital. It has a race track and cricket grounds, and claims some of the finest motor roads south of the Equator.

CHAPTER XXXVII

THE SAMOAS

Western Samoa, our ship crossed the date line, and when we sailed over the 180th meridian, east longitude, we went from one day into the day before. I felt some satisfaction in getting back one of the many days I have lost in going across the Pacific in the opposite direction.

It was delightful sailing along the Equator. We had nothing but sunshine, and such glorious sunshine! As we coasted the island of Savaii, the largest of the Samoan group, the air was fresh and the wind strong enough to make it cool and pleasant. The sea was steel blue, with silvery whitecaps dancing upon it, between us and the shore, and the sky was full of white, smoky clouds.

The volcanic island of Savaii in its thick cloak of verdure makes one think of the Hawaiian Islands. As we passed along its shores it seemed a great hill shaped like a horseshoe, with the ends of the shoe sloping down to the water.

Going on we soon reached Upolu, on the north coast of which Apia is situated. Both Upolu and Savaii now belong to the Territory of Western Samoa, which has been created from what was formerly German Samoa and is now administered by New Zealand under a mandate from the League of Nations. The United States owns Tutuila, Manua, and some of the smaller islands of the group.

When Germany and the United States came to their agreement about the division of the Samoas in 1899, the Germans, in their greed for land, were glad to take the two biggest islands. But out here it is thought that we got the best of the bargain. Both Savaii and Upolu together are not so large as Rhode Island, and much of Savaii has been so recently subject to volcanic action as to be unfit for cultivation. Savaii is forty-eight miles long and twenty-five miles wide, and Upolu is a good deal smaller. Both islands are mountainous and well watered. Like Tutuila, they have been built up by volcanoes and are for the most part surrounded by coral reefs.

As I came into the harbour of Apia the tide was low. and I could see a great garden of coral rising out of the water. Here and there along the shore were groves of coconut trees, and, farther up the mountains, plantations of cacao. Amid the green jungle on the hills I noticed patches of chocolate brown, where the ground had been cleared for cacao plantations. Just back of Apia gleamed the white villa where Robert Louis Stevenson lived, and above it rose mountain after mountain of different shades of green or blue, covered with vegetation and canopied by masses of fleecy clouds. Here the shadows turned the sea to green, and there to navy blue, while upon the land they made a mass of light and dark patches of velvet on the green crops and the still deeper green forest. Close to the water's edge were what from our steamer looked like vast cornfields. These the captain said were coconut orchards, containing tens of thousands of trees loaded with millions of nuts

I am disappointed in Apia. From Robert Louis Stevenson's letters and the place it once held in international



As they grow older the Samoan girls lose their beautiful figures but never part with their sweet dispositions and their love for ornaments and flowers. The women marry in their 'teens, and large families are the rule.



The chief product and export of Samoa is copra, the meat of the coconut. Dried and packed in sacks, it is shipped abroad for use in making soaps, toilet preparations, and "nut" butters.

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affairs I had expected to find it a large city. It is really a small town with a foreign population of less than five hundred British, Germans, New Zealanders, and Swedes, with a few Americans and French for good measure. Its buildings are bungalows, with roofs of galvanized iron, strung around the harbour.

Our steamer was greeted by a great crowd of Samoans and the whole population of foreigners, through which I went up to the Tivoli Hotel, my headquarters during my stay. It did not take me long to exhaust the sights of Apia. The town has a half-dozen business houses engaged in shipping cacao and copra and in furnishing the natives with different kinds of fancy goods, cottons, and tinned stuffs. There are also two photographers, a number of consuls, and a baker's dozen or so of government officials.

My guide over the island of Upolu was one of the Samoan chiefs. He was half naked when I came into his house, a kind of thatched shack not far from Apia, but he dressed himself in my presence and went about with me. I found that he spoke good English, knew the islands well, and was very intelligent, as are all the natives I have so far met.

With him I visited many of the native houses. Owing to the hot climate, the Samoan dwelling is scarcely more than a roof made of plaited branches supported on a number of slender posts through which all the airs of heaven may circulate. The walls are mats of fibre which are rolled up inside and against the roof when not in use, and which may be let down to keep out the wind and rain. Not a nail is used in the construction of such a house, but instead the parts are tied together with yards of plaited coconut fibre called cinnet. The men spend much of

their leisure time plaiting cinnet, some of which is as fine as twine.

The floor of the typical hut is a circular terrace raised about two feet above the ground and surrounded by a shallow ditch. The terrace is made of stones closely fitted together, and over it is spread a layer of white coral pebbles gathered from the beach to form the carpet for the hut. The pebbles, which serve for mattresses as well as floor covering, are sometimes known as "Samoan feathers." When the native is ready for bed he simply lays a fibre or grass mat upon them, takes down his pillow from the rafters, crawls under his mosquito net, and goes off to the Land of Nod. His pillow is no more than a little log set on four short legs so as to raise his head well off the floor.

The Samoans have always been noted for their hospitality. They give all strangers a cordial welcome, and food, lodging, and even clothing may be had in any native house without thought of compensation. Nevertheless, when a white visitor stays in a Samoan home he gives presents on leaving to the full value of his entertainment. No native guest ever does this, but the foreigners have been so liberal in the past that they have led the people to expect gifts. No Samoan host would, however, lower himself so greatly as to take money. In almost every settlement there is a "Taupo," or "Maid of the Village," elected by the people to receive guests and take a leading part in all public ceremonies and festivals. When she goes any distance from home the maiden is surrounded by a train of elderly women as chaperons. She holds office for a few years, or until she is married

The Samoans are a clean people. Everywhere I see 276

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them in bathing. The women and the men wade about waist-deep in the streams and swim together in the surf, splashing one another, and acting more like children than grown-ups.

The young women have beautiful forms. They are as straight as the statue of Venus in the Capitoline Museum at Rome, and as plump and as well formed as the Venus de' Medici. Their complexions are of a rich chestnut brown and their large soulful eyes are full of smiles. Unfortunately they often bleach their black hair to a bright red by the use of lime. Both women and men are good-natured, gentle, kind, and easily governed.

I have been asked to investigate the chances for Americans to get rich in the Samoan Islands. Robert Louis Stevenson made about twenty thousand dollars a year out of his books, but as far as I can learn, for all his sweating on his cacao plantation, he did not get a cent out of it. The islands have an excellent climate. It is good for consumptives, and if the consumptive were anything else than an impractical newspaper or literary man he might prosper at coconut raising or in growing cacao. There are cacao planters on Upolu who are making money.

Cacao plants produce the seeds from which chocolate is made. The trees are planted in rows about fourteen feet apart and it is four years before they come into bearing. After that time, if properly cared for, they are profitable. One Samoan planter has recently netted more than twelve hundred dollars a year from sixty acres, and there are others who are doing equally well.

This man has three thousand trees planted at Pago Pago and expects to set out more. Another planter I have heard of got nine hundred dollars a year from less than

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eight acres of cacao in American Samoa. It is estimated that two thirds of all the land in the Samoan Islands is suitable for the growing of cacao. As to coconuts, there is money to be made in raising them on almost any of the Pacific islands.

During my stay at Apia I have heard much about things in our part of the Samoan Islands. The Tutuilans now consider themselves American citizens and hurrah for the Stars and Stripes as enthusiastically as we do on the Fourth of July. The government has brought quiet to the island, torn for years by strife among the different tribes. Figuratively speaking, the people are now turning their swords into pruning hooks.

We are ruling the Samoans after the Dutch method; that is, we are working through their chiefs and allowing them to govern themselves. Every village is a little republic, with its own chief, who is in most cases a hereditary ruler. Our naval officers, who administer the islands, sit behind the chiefs and pull the strings, and the people think they are ruling themselves. Unless inconsistent with our laws, native customs are never changed without the consent of the people. Missionary work is encouraged.

The Island of Manua contains about twenty square miles. It is mountainous and surrounded by coral reefs. The mountains are about a half mile in height, but the land rises so gradually that the whole island can be cultivated.

The Manuans are much the same as the Tutuilans, except that, being out of the line of ocean steamship travel, they are less advanced. They have had missionaries for the last century and are Christians. They have churches and schools and live peacefully under their king,

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producing enough food for themselves and selling enough copra to satisfy their few other wants. Coconut and banana plantations are being put out on all our islands. The American naval officers with whom I have talked have nothing but good to say of the people.

When the Americans first took possession, a party of officers was received in great state by the King of Manua, who insisted on treating them to kava before he discussed business. He had his chiefs with him, and the Queen sat beside him during the audience. The kava was brought in by the belle of the island in a cup fastened to a branch of coconut palm. It was given first to the king, who handed it back to her, whereupon she filled it and again gave it to His Majesty. After pouring some on the ground, he took a drink of it. It was next presented to the officers in the order of their rank and they had to drink it, although they knew of the traditional way of making this native beverage.

Kava comes from a root grown in the Pacific Islands and by the old formula is made in the following manner: The kava is washed and cut up into little cubes. Then a young girl, preferably a pretty girl, after washing her hands and rinsing her mouth, begins to work. She puts one cube of kava into her mouth, and chews it vigorously. When it is well masticated she adds another and another until she has in her cheeks a mass of fibre as big as an egg. This she takes out and lays in a large flat bowl and then begins to form another egg. She keeps on making eggs until all of the root is chewed. Then water is poured into the bowl, and the girl begins to knead the fibrous mass under it. When it is strained it is a milky liquid that tastes for all the world like a mixture of soap-

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suds and bitters. It is not considered intoxicating, but when taken in excess it goes to one's knees, so that for a time the imbiber cannot walk straight.

This drink is used in all the islands of the Pacific. In the out-of-the-way Samoas a person making kava has the right to ask any girl who is passing, no matter who she may be, to come in and chew his root for him. In most parts of Samoa this practice of chewing has died out, and the roots are now pounded up with stones instead. In the more remote districts, I am told the old custom prevails.

The London Missionary Society is doing much good throughout all parts of Samoa. It has been working here for three generations and claims thousands of converts to Christianity. Roman Catholics also have missionaries on some of the islands. The Samoans are naturally religious and the level of their morality is far higher than that of the foreigners who bring in whisky and introduce the vices of civilization to these southern seas. There are, it is true, high-class business men scattered through the various archipelagoes, but the average beach-combing trader is as a rule a curse instead of a blessing and most of the evils that have come to the people are due to him.

For many of us the chief interest of the Samoas lies in the fact that it was near Apia that Robert Louis Stevenson passed the last years of his life and did much of his best writing. While I was there I rode up to "Vailima," the big, rambling house in which he lived. Some time after his death the place was purchased by a wealthy German planter, who did all he could to dispel the Stevenson atmosphere and soon destroyed most of the vestiges of the former owner's taste. He put up a sign over the gate beginning with *Eingang verboten* and going on to say in

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English, French, and Samoan, as well as German, that strangers were forbidden to come inside the enclosure. He allowed Stevenson's tomb to become overgrown with weeds, and the pilgrimages to it from the incoming ships became fewer every year.

Now "Vailima" is the official residence of the administrator of Western Samoa and Stevenson's memory is kept much greener than it was in the days of German control. Once more travellers go up the steep mountain path to the peak of Vaea where he was buried as he had requested. You recall how much the Samoans loved their "Tusitala," or "Teller of Tales" as they called Stevenson. Part of the road from Apia to "Vailima" was laid by them and christened "The Road of the Loving Hearts." At his funeral it was the natives who had worked with him who bore Stevenson's body up the steep path to the mountain top, where he now lies with the Pacific at his feet. On his tombstone are the lines of the "Requiem" he had written to be inscribed there:

Under the wide and starry sky,
Dig the grave and let me lie.
Glad did I live and gladly die,
And I laid me down with a will.

This be the verse you grave for me:
"Here he lies where he longed to be.
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